



Painter Nuzi Aeonis (1891-1937) was one of the prominent female personalities of Romanian fine art in the first half of this century. She attended the Fine Arts School in Iasi. She travelled to and worked on the Black Sea coast, in the Greek islands of Crete, Syra, Mykonos as well as in Asia Minor, which brightened up her palette. Her lyrical, broad, the mark of a solar mind, attracted by simple joys, by the quiet and balance presupposed by life in a sunny natural environment, with a generous and friendly flora and fauna. A slight nostalgia after the vestiges of old-time civilizations increases the charm of the landscapes and compositions she made on her travels. The same serenity — a freshness of colours resulting from a mixture of austerity and emotional involvement — also appears in the landscapes of Arges, Tulcea, Mandra Valley (Cel Boas, Horse Shovel etc.). A good painter of the inward spaces and of urban landscapes, Nuzi Aeonis followed the tradition of the national art school, being inclined towards balance and harmony. An expert critic, a well regarded commentator of the Romanian artistic phenomenon, N. Argintovici-Amza, stated that "in the context of interwar painting, Nuzi Aeonis's evolution is characterized by an enrichment, deepening and authentic refinement of her expression means." Her outstanding work of beauty materialized in touching artistic successes, such as Still Life with Grapes, Cloot Landscape, Muscel Landscape, Ballet Dancer, Home Interior, In the Woods, In Autumn, In the Vineyard, In Iasi, Tulcea Landscape.

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## THE OFFICIAL GOODWILL VISIT PAID BY NICOLAE CEAUSESCU AND ELENA CEAUSESCU TO INDONESIA

Romanian President Nicolae Ceaușescu, together with Elena Ceaușescu, paid an official goodwill visit to Indonesia over April 8-10, upon the invitation of President Suharto and Mme Tien Suharto.

During the visit — the communiqué released shows — the distinguished Romanian guests conducted official talks with President Suharto in an atmosphere of friendship and mutual understanding. The two presidents expressed their satisfaction at the continuous growth of the ties of friendship and cooperation between the two countries and agreed to intensify them ever more in all areas of common interest.

They underlined the particular importance of housing and diversifying economic cooperation for the general development of the links between the two countries.

The two countries' presidents highlighted the need for further steps towards a more dynamic growth of trade and of economic cooperation in industry, mining, petroleum, agriculture, ocean fishing, as well as other areas of joint interest, on the basis of long-term agreements.

They also expressed their wish to intensify cultural exchanges and contacts and emphasized the importance of contacts at a governmental and parliamentary level, between youth and other public organizations in the two countries.

On surveying the international political and economic situation, President Nicolae Ceaușescu and President Suharto noted with satisfaction the identity or closeness of Romania's and Indonesia's points of view on the major problems confronting mankind, the communiqué shows.

Firmly declaring for a complete elimination of nuclear weapons, the two presidents assessed that the signing of the

treaty between the USSR and the USA on the elimination of medium and shorter range nuclear missiles was an event of historic importance, but it was just a first step on the road to liquidating the huge nuclear stockpiles existing in the world, the communiqué reads. Romania and Indonesia are of the opinion that concrete action should be taken for further accords on a reduction of strategic nuclear weapons and the complete elimination of nuclear arms, for the cessation and banning of nuclear tests, for renunciation of space militarization and the adoption of a convention on the banning and destruction of chemical weapons, on the liquidation of other weapons of mass destruction.

President Nicolae Ceaușescu and President Suharto declare for the drafting of the UN and the carrying into effect of a complex disarmament programme, whose centerpiece should be the phased-out elimination of all nuclear weapons, chemical and other arms of mass destruction, and which should also stipulate a substantial cut in conventional weapons, troops and military spending.

Romania and Indonesia emphasized the important role of the Association of South East Asian Nations (ASEAN) in the development of cooperation among the member states, in ensuring their economic and social progress, a climate of peace and understanding in the region.

The two presidents declared resolutely for an exclusively peaceful, negotiated

(cont. on p. 3)



## THE OFFICIAL VISIT PAID BY NICOLAE CEAUSESCU AND ELENA CEAUSESCU TO AUSTRALIA

On Monday, April 11, Nicolae Ceaușescu, Romania's President, together with Elena Ceaușescu, started an official friendly visit to Australia, upon the invitation of Ninian Martin Stephen, that country's Governor-General.

During a meeting which the distinguished Romanian guests, immediately after their arrival in Canberra, had with the Governor-General of Australia and his wife, the conviction was expressed that the visit will open, through its results, prospects for a more intense development of the relations between the two countries and peoples, in the mutual interest of the cause of peace, understanding and collaboration among nations.

In Canberra, President Nicolae Ceaușescu and Elena Ceaușescu met Australian Prime Minister, Robert James Lee Hawke.

On behalf of the Australian Government, Prime Minister Robert James Lee Hawke expressed that the visit of the Romanian head of state to Australia marked an important moment in the development of relations between the two countries.

He also expressed his conviction that the visit of President Nicolae Ceaușescu, together with Elena Ceaușescu, to Australia was a significant step in the development of friendly relations between the two countries, and that it would lead to a further intensification of cooperation in all fields of common interest.

The visit was further conducted in the presence of the Romanian and Australian delegation members.

During the talks, emphasis was placed on the ties existing between Romania and Australia, which have seen a continuous development on the basis of fully equal rights, mutual esteem and advantage, on the possibilities of further expanding bilateral links in that context. It was assessed that the present economic potential of Romania and Australia provided conditions for intensifying and diversifying bilateral relations, more particularly cooperation in mining, metallurgy, machinery, building, as well as in the fields of agriculture, trade, tourism, and other areas.

The importance was stressed of settling the Romanian-Australian economic cooperation on a stable and lasting basis.

The visit was assessed that the further development of the ties between Romania and Australia, on a political, economic, technical, scientific plane was beneficial to both countries, to the cause of world peace and cooperation.

The exchange of opinions on current

(cont. on p. 3)





# ROMANIA IN THE WORLD • ROMANIA IN THE WORLD

## EXCERPTS FROM ARTICLES CARRIED BY THE FOREIGN PRESS

### PAKISTAN

The English-language Pakistani newspaper MORNING NEWS published a special supplement devoted to Romania which includes articles, commentaries and biographical data on President Nicolae Ceausescu. In a historically short period of time — the article entitled Today's Romania — A Country in Full Swing — of Romanian news — Romania has turned from a poorly developed country into a state with a modern industry and a fully developing agriculture, and at the end of the current millennium it will become a medium developed country.

After presenting numerous figures and data on the progress registered by Romania in all spheres, the newspaper mentions that Romania's development programmes, very much like those of other states in the world, can only be carried out in a climate of international collaboration, confidence, security and peace. Defining this position, President Nicolae Ceausescu has imparted principles and dynamism to Romania's foreign policy, has given impetus to the expansion and consolidation of the country's international ties, infusing steady efforts aimed at the constructive and lasting settlement of the major issues confronting mankind. In its foreign relations, Romania most firmly promotes the principles of international law — observance of national independence and sovereignty, fully equal rights, non-interference in internal affairs, nonrecourse to the use and threat of force. Turned into a political programme of initiative and action, these norms have ensured and guaranteed peaceful working conditions and complete security to the Romanian people, the Pakistani daily shows.

In the article Romania's President, Nicolae Ceausescu — A Great Hero of Peace is written: For more than 22 years Romania has been brilliantly led by President Nicolae Ceausescu. The Romanian people has entrusted its destiny to this great statesman, in whose personality ardent patriotism is combined

with responsibility for the fate of the entire mankind.

Nicolae Ceausescu is an astro fighter for peace now that in the whole world conflicts are aggravating, new destructive weapons are stockpiled, and the fundamental right of people, the right to life is endangered. His peace initiatives are meant to open new realistic paths, with a view to re-establishing a climate of détente, to settling up a world free of weapons and wars. And it is a truth of our times that the progress made by Romania in all the domains of the economic-social life, its realistic and constructive international policy, make the whole world highly respectful of the prominent personality of President Nicolae Ceausescu.

In the centre of its whole international policy, the article points out, Romania places the fight for peace. In President Nicolae Ceausescu's conception, this fight can only be victorious by joining the efforts of all peoples, of the progressive realistic forces all over the world.

The article called A People Trusting Itself speaks about Romania's achievements.

The military character of the socio-political doctrine by which phenomena and questions of the country's internal life and of the contemporary world are approached, shows the article, illustrates President Nicolae Ceausescu's superior conception of society and people, his skill of permanently turning general theories into concrete realities, of defining, through a harmonious combination between theory and practice, a comprehensive programme of resolute action, in full accordance with what modern science brings new, with the progress of knowledge, with the dynamics of reality itself.

The Ceausescu doctrine is founded on an active, innovative political philosophy whose central idea is the assurance of the country's multilateral progress through the Romanian people's own efforts.

Surveying the development of the country, the article concludes that in the years when Nicolae Ceausescu, this great statesman, has been counting the minutes, the people has worked to accomplish increasingly more and better, in order to show the world what a free people, master of its destiny, can achieve.

### INDONESIA

THE INDONESIA TIMES daily which has a wide circulation, brought out a four-page supplement under the title Romanian Country Militating for Peace and Progress.

The Indonesian readers were presented moments from the biography of President Nicolae Ceausescu, his tireless activity, since early youth, for social justice and national liberation, for the independence of the country, against fascism and war, for the multilateral progress of Romania.

Then followed the presentation of the main coordinates of Romania's international activity which the imprint of President Nicolae Ceausescu's thinking, of his constructive endeavors in the world arena. Emphasizing the special attention by joining the efforts of all peoples, of the progressive realistic forces all over the world.

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DSc, a scholar of international prestige whose scientific activity is directly related to the setting up of scientific research units equipped with modern means, to the organization of science into a coherent, functional system.

The commentary headed The Ties between Indonesia and Romania See an Ascending Course shows that despite the different social systems and great geographical distances separating them, the two countries have found the way for a fruitful collaboration based on the principle of equality, on the basis of mutual respect, on the basis of the common interest.

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system, goes down as one of the defining guidelines of the Romanian foreign policy, consistently asserted over the last decades, since President Nicolae Ceausescu, a prominent personality of the contemporary world, was chosen to lead Romania.

Preventing the policy of host collaboration promoted by Indonesia, the development of the foreign relations, the article reveals that the impressive dynamics of this process, the continuous development of ties with all states of the world, regardless of social system, based on the broad premise of the summit dialogue, on the talks held by President Nicolae Ceausescu in Romania or during his numerous foreign visits.

The hierarchy of international peace and collaboration to center on all continents represent reference moments in the chronicle of Romania's relations with the outside world, with the developing states, with all countries.

Heads of state and government, personalities of international political and scientific life, runs the newspaper, has expressed their high consideration for the principles of the Romanian foreign policy, for the consistency with which Romania promotes a system of new interstate relations, in full accordance with the imperious needs of the epoch.

The BERTA BUENA daily published in Jakarta carried an article in which were presented the main data on our country, significant elements for one's acquaintance with the high development rate of the national economy, the daring programme of modernizing industrial activity, of carrying out the new agrarian revolution, the fundamental directions in which the entire Romanian people's efforts are now focused.

The article entitled Romania's President, Nicolae Ceausescu — A Brilliant Example of the Country's Foreign Policy emphasizes the main orientation of Romania's activity in the international arena.

President Nicolae Ceausescu's research to the development of society, of setting up a contribution to the elaboration and translation into life of the Romanian foreign policy, the Romanian head of state to the promotion of the cause of disarmament, collaboration and peace on our planet.

Romania's prestige today — shows the newspaper — is closely linked to the thinking and activity of the man who has been leading it for more than two decades, the eminent politician and statesman well known and appreciated in the world — President Nicolae Ceausescu.

Also printed was the article headed Romania's President, Nicolae Ceausescu, A Distinguished Militant for the Developing Countries' Access to the Latest Breakthroughs in Science and Technology.

A special place was held in the same newspaper by a commentary on the powerful development of scientific research in Romania, entitled Science — A Gato to Social Progress. The commentary points out that under Elena Ceausescu's guidance, the scientific research activity has acquired great scope and significance, a modern structure and a new status, being closely integrated with education and production at present.

### AUSTRALIA

THE AUSTRALIAN daily issued a richly illustrated supplement devoted to Romania.

Under the title The People's Progress the daily presents biographical data concerning the life of President Nicolae Ceausescu and his rich activity at the head of the Romanian party and state, pointing out the personality of the Romanian statesman who has been carrying through the work by his tireless activity, devoted to the creation of a better and more just world for our planet.

In the leading of a social friendship and peace the daily runs that the vast and fruitful activity for the continuous development of relations of collaboration with all the states of the world, regardless of social

## TO INDONESIA

(cont. from p. 1)

solution to all interstate disputes.

Romania and Indonesia firmly militate for a comprehensive, just and lasting solution to the Middle East problems. The two countries are for the calling of an international conference on the Middle East, under the aegis of the United Nations, to be attended by all the sides concerned, including the Palestine Liberation Organization and Israel, the UN Security Council permanent members.

Romania and Indonesia declare for the immediate cessation of hostilities between Iraq and Iran, for the undelayed withdrawal of all foreign troops from the Gulf, the securing of free navigation in the region, and for the peaceful, negotiated settlement of the disputes between the two countries.

Romania and Indonesia declared for the political, negotiated settlement of the situation in Kampuchea, for a broad national reconciliation of all forces and the securing of Kampuchea's independence, sovereignty, neutrality and non-alignment. This requires the withdrawal of all foreign troops and the cessation of any interference in Kampuchea's internal affairs.

Romania and Indonesia reiterate their solidarity with the African peoples' struggle for the eradication of colonialism, for the consolidation of national independence and self-determination, for the complete renunciation of nuclear weapons, for the complete renunciation of space militarization, and the reduction of conventional weapons, troops and military spending.

During the talks it was assessed that the building of security and cooperation in Europe would exert a positive influence on the international political life, and would meet all peoples' interests.

Romania's President and the Prime Minister of Australia declared for the elimination of the

economic order were imperative requirements for the peoples' peace and security, declared for the holding of an international conference within the UN, participated in, on an equal footing,



## TO AUSTRALIA

(cont. from p. 1)

Aspects of the world political life evinced the closeness of ties between the two countries, points of view on the questions approached.

The international situation was assessed to be still serious

and complex, and emphasis was placed on the need for peoples to intensify their fight for halting the dangerous course of events toward confrontation, for the promotion of the cause of disarmament, collaboration and peace among nations.



by both developing and developed countries, in order to reach mutually acceptable solutions to economic issues, including the issue of the global settlement of foreign debts, which are an ever heavier burden to the developing countries, for the establishment of a new,

more just and equitable world economic order.

Satisfaction was expressed at Romanian-Indonesian collaboration in international life, and the two presidents, the communist points out, decided on its intensification within the UN and its specialized agencies.

within the Group of 77 and the non-aligned movement.

Nicolae Ceausescu and Elena Ceausescu extended to President Suharto and Mrs. Tien Suharto the invitation to pay an official visit of friendship to Romania. The invitation was accepted with great pleasure, the communiqué shows.



It was shown that the halting of the arms race, a passage to disarmament, nuclear first and foremost, and the ensuring of world peace were fundamental problems. In that context, it was stressed that everything possible should be done for the conclusion of new accords with a view to liquidating all nuclear weapons, for the cessation of nuclear tests, the complete renunciation of space

militarization, and the reduction of conventional weapons, troops and military spending.

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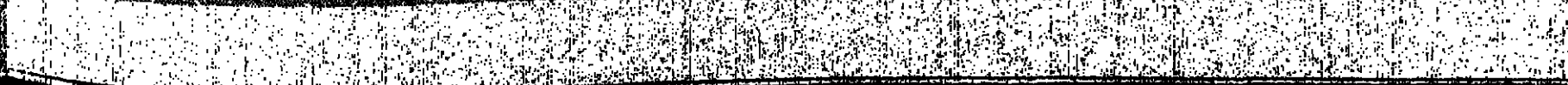
use and threat of force from international life, the cessation of all military conflicts in various parts of the world and their peaceful, negotiated settlement.

In connection with the world economic situation stress was laid on the significance of solving the questions related to underdevelopment and the building of new international order, on the basis of full equality and equity in interstate relations.

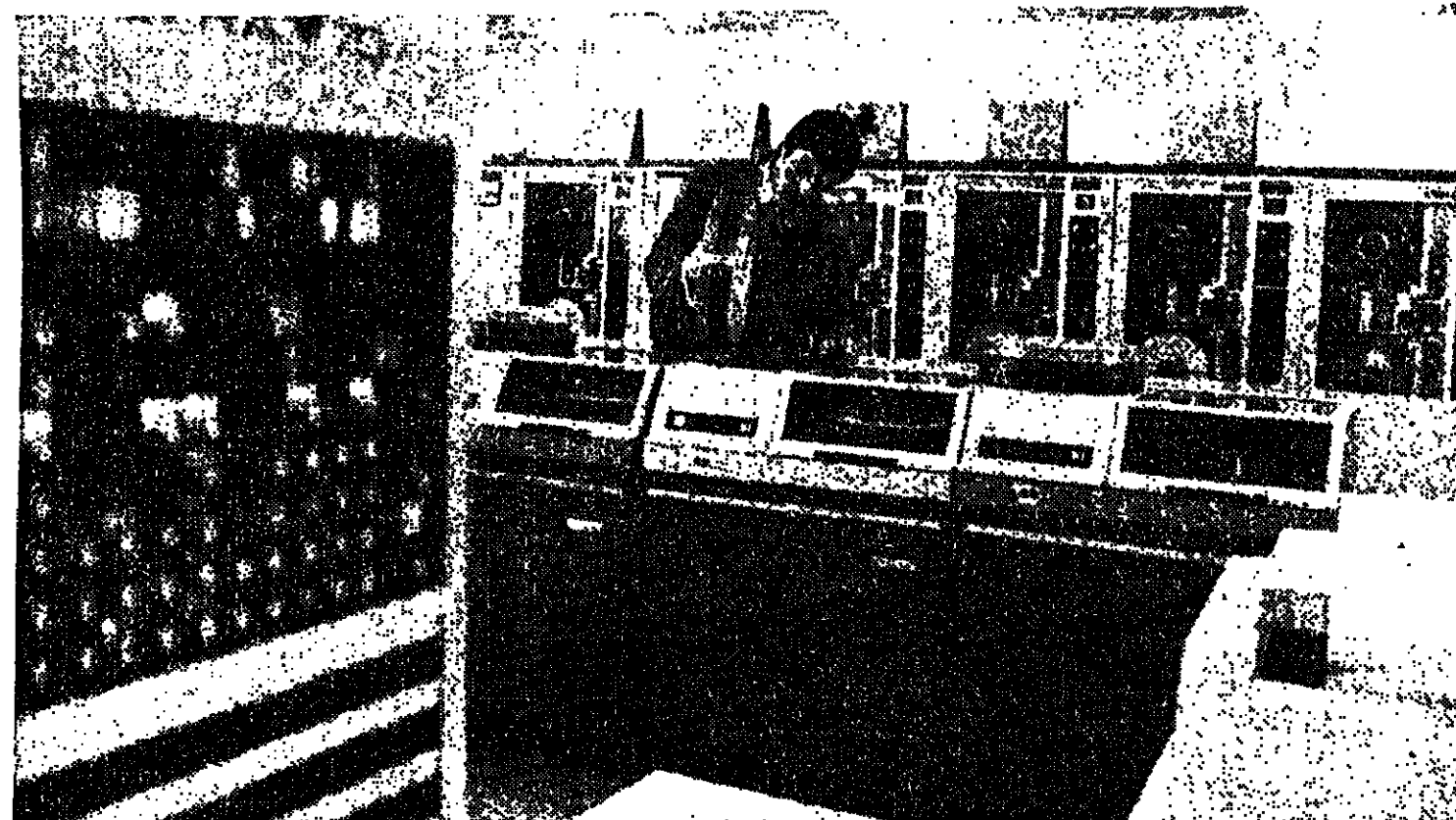
President Nicolae Ceausescu showed that Romania, though an international conference should be called within the UN and attended by all developing and developed countries, on an equal footing, so that mutually acceptable solutions be found relating to the extremely big debts burdening the developing countries.

The determination of Romania and Australia was expressed to strengthen their cooperation within the UN and other international bodies, actively contribute to solving the major problems facing mankind in the people's interests, to achieving a lasting peace on this planet, establishing new-type democratic relations among all nations, underlain by the principles of fully equal rights, respect for national independence and sovereignty, non-interference in internal affairs and mutual advantage.

Concluding their visit to Australia, President Nicolae Ceausescu and Elena Ceausescu were the guests of the state of Queensland. During an interview between the distinguished Romanian guests and the state's governor, Walter Campbell, reference was made to the fine relations that have been established and developed between Romania and Australia. In Brisbane, President Nicolae Ceausescu received a group of businessmen with whom he discussed questions related to the collaboration between Australia and Romania.







## INFORMATICS, COMPUTER TECHNOLOGY AND PROGRESS

In Romania, a country boasting a competitive hardware production apt to meet all the requirements of an economy in full swing of modernization, computer technology has rapidly expanded from the realm of economic management to that of design and production of controlling technological processes. Grafted on to nearly all conventional technologies, the computer ensures superior constructive and functional parameters, on a world scale.

Leading sectors of the national economy have resorted to computer technology and informatics

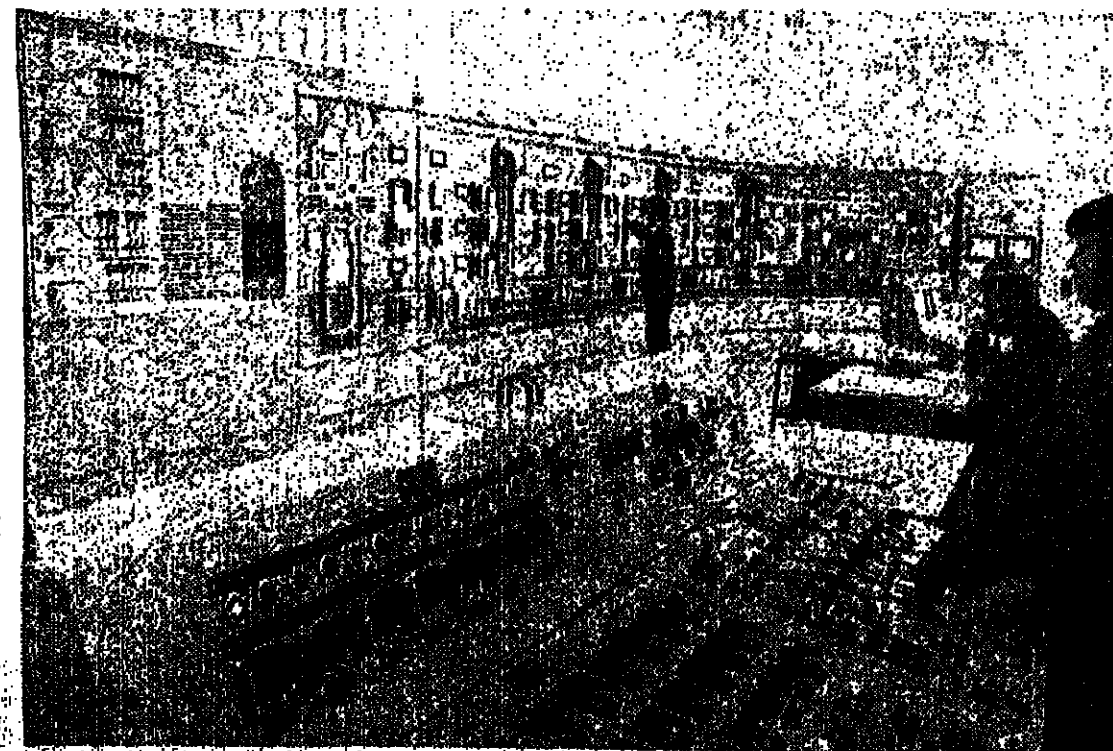
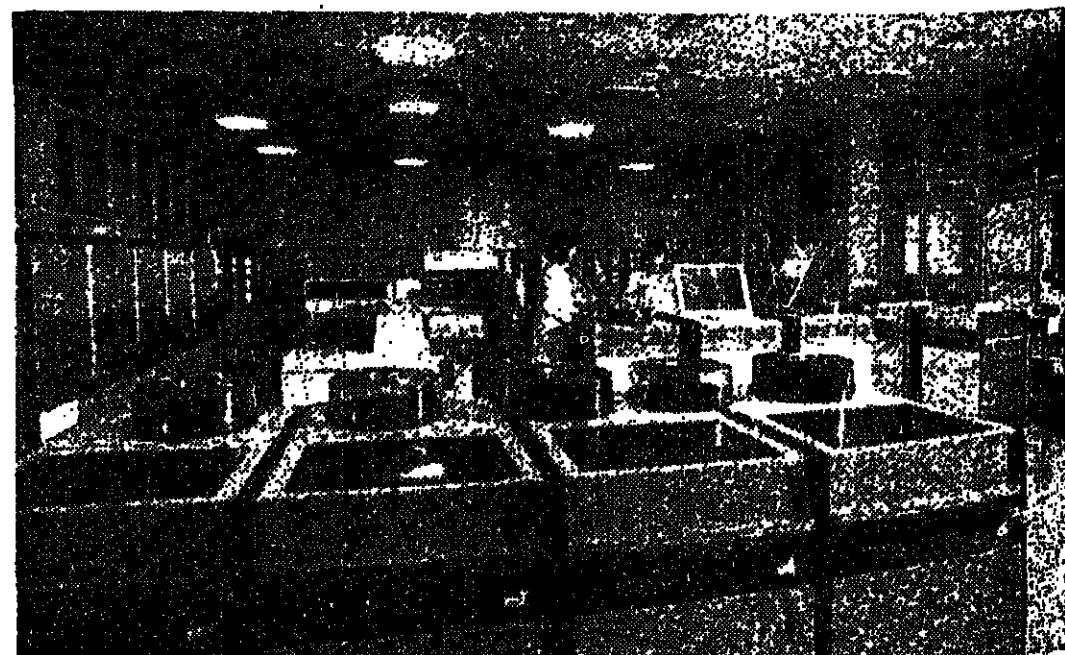
means in order to find new solutions of curtailing material and energy inputs, improving the pace of production, enhancing its quality and, last but not least, adding new significance to the human activity. The most spectacular results were obtained in aluminum manufacturing, fine mechanics and electronics, not to mention the fact that today the control of the national power system, the computer-aided design and construction of highly complex aeronautic, shipbuilding or electronic products would be inconceivable.

Below, we shall refer to the latest informatics product, meant for the operational coordination of production processes, called Dispecer and devised by the specialists of the Computer Technology and Informatics Institute in Bucharest. The system of this informatics family were finalized with the help of Coral and Independent M 118 or, more recently, Felix PC ml-

### MICROCOMPUTERS IN METALLURGY

Based on the success registered by the introduction of microcomputers at steel works No. 1, represents an advanced stage of promoting informatics. By means of Coral and Eascom computers used by all four furnaces of the steel works, the process of charge manufacturing is automatically controlled, energy consumption, as time and intensity, has been reduced according to the quality of steel types obtained. The results are good — an electric power economy of 1,000 MWh annually from a single steel works.

Now, the work front of information scientists is rolling mill No. 4, where a microprocessor was installed in February. The electric power economy achieved, after the improvement of consumptions will be of 100 MWh. The programme for 1988 provides concrete solutions for the modernization of 15 process applications for the automatic coordination of certain technologies. Computers are used for the elaboration of steels with alloy modules, applications being developed up to the automation of storing chemical tests from the quantimeter on the computer. Through the computer control of rolled plates, the thermal treatment with all its implications upon consumptions will be eliminated, leading to an estimated economy of 1,000 tons of conventional fuel yearly. Informatics has successfully penetrated the drawing works for high alloy steel where, besides equipment control, the computer will also store certain quality parameters like limit of stretching strain, yield point, maximum tear force, etc.



microcomputers. Through the use of specific mathematical models and performing algorithms, the optimum variance of the production programme can be computed in a few minutes. Moreover, through the adequate use of the computer, the production dispatcher can obtain numerous pieces of information regarding the production process, as well as assessments of the various decisions made could take. Thus, the Dispecer programme is a complex system assisting decision making in managing production, making it possible to blend the huge memorizing and calculation capacity of the computer with the human knowledge and experience. In this kind, have been introduced at the chemical and petrochemical works of Mida-Năvodari, Brazi and Timisoara, as the pulp and paper plant of Suceava and other large industrial units including complex technological processes. Working with good results, the informatics systems for managing production and controlling large-scale steel with the help of microcomputers at the iron and steel works in Galati, at the similar works in Botosi there is

### CYBERNATION ROAD TRANSPORT

A conversational informatics system, with terminals in the main sectors of the Bucharest Road Transport Central, has started to be used in the operation of vehicles and the drawing up of transport plans.

In the next stage, until the end of 1988, this system will also supply the necessary data on the carrying out of the plan in the central as a whole and in each county enterprise. The system is user-friendly, so that it may be operated by the centrally own personnel, being structured on a Felix computer and other equipment made in Romania. The drawing up of the plan, with breakdowns for the central and for 42 subordinated enterprises, by means of the computer has saved a considerable volume of work which would normally have been performed by 800 people. The modelling of international transport orders through the conversational informatics system has resulted in a better utilization of the existing resources increasing the number of trips made by each vehicle and rendering return trips fully efficient. Consequently, while a seven per cent increase in the utilization of transport capacities on return trips was originally envisaged, a 11 per cent increment was eventually obtained, which was the equivalent of an annual economic efficiency worth some 40 million lei in additional profits.

The fact that each county road transport enterprise has its own informatics system is a fundamental prerequisite to the connection to the central informatics system. To this end, a Felix 5000 computer has been acquired, the latest and most advanced creation of the Bucharest Computer Factory, which will be connected to the national teledata processing network and therefore, to the county centre, making possible the monitoring of road transport throughout the country.

## SHIPPING SIMULATORS

Ranking among the recent achievements of the Bucharest Institute of Researches and Technological Designs in Transporting are the flight simulators for various aircraft and the simulators for Diesel and Diesel-electric locomotives bringing together mathematics, robotics and mechanics. If symbolism theorized the creation in poetry of synesthetic sensations, the subjects mentioned above did quite the same through mathematical modelling and informatics technologies, recreating an artificial universe generating tension and emotion.

This article proposes to deal with a family of simulators, meant for training merchant marine officers, which have already been mounted at the Communist Merchant Marine Personnel Training and Development Centre. "The apparatus", said our colleague, engineer Iuliu Barbo, head of the simulator section of the above-mentioned institute, "answers certain requirements related to both the training of marine officers and the international regulations increasingly more severe and exigent as regards the training of marine officers given the growing ship traffic and tonnage.

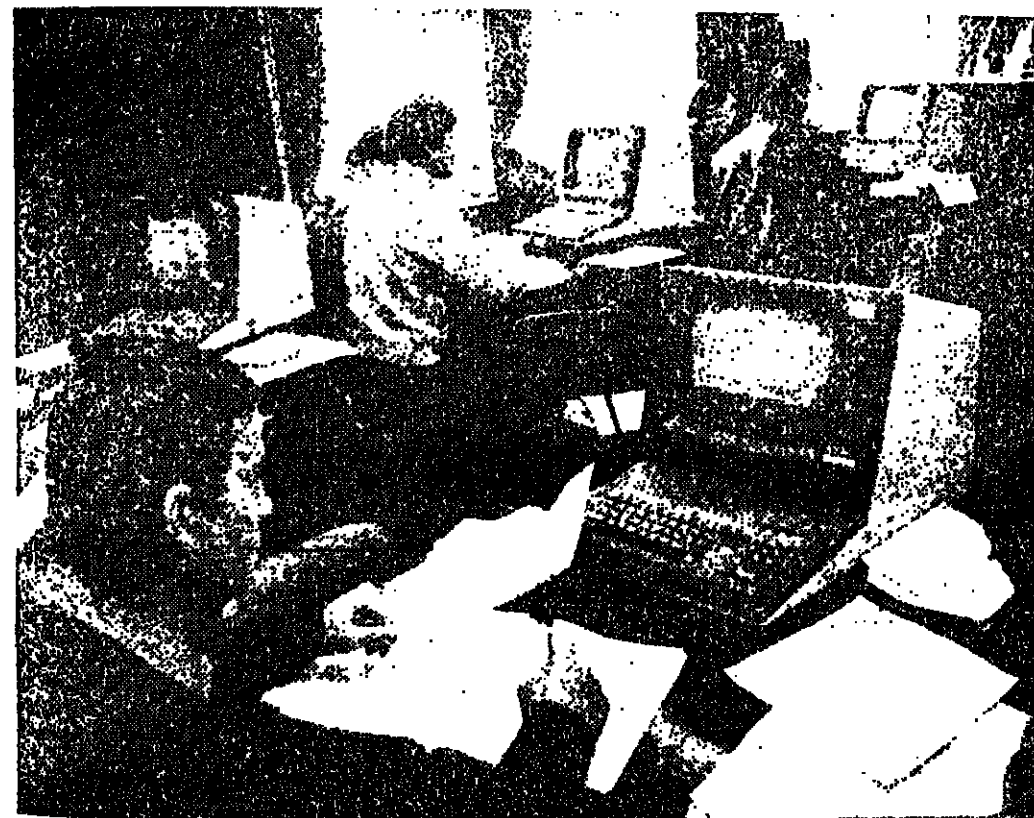
Obviously these are safety measures aimed at avoiding collisions and the pollution of the world ocean. At present, these international rules stipulate that marine officers should previously be trained on simulators."

One may naturally wonder why. It is because simulators train pupils intensively, placing them in special situations which otherwise they would meet only seldom in their daily activity on the ship. The pupils can then be asked to steer the ship in areas with a heavy traffic and the certain restrictions such as the Bosporus Strait or the British Channel, where ship convoys

passing continuously call for maximum attention.

As is known, there are deck officers and mechanical officers. The former manoeuvre the ship, while the latter ensure the perfect functioning of all installations, promptly answering the requests from the control deck such as altering the engine's speed or the ship's propulsion force. Sometimes, our colleague said, averting a collision depends as much on the skill of the officer in control as on the promptness of the mechanical officer.

In the last few decades, the transport of oil products by ships has gained momentum. Oil tankers call for special training both as regards the handling of goods and environment pollution. This condition of the sea is actually monitored by satellites, which signal any leak of oil and the ships responsible for this are sanctioned by virtue of strict rules.



## INTENSIVE INSTRUCTION

Corresponding to various specialties (deck officers and mechanical officers) and to the ships meant for special loads (tankers) a programme was introduced at the simulation lab, in order to create a new family of naval simulators, like the radar simulator for sea navigation and the naval machine loading-unloading oil tankers in under construction and a river navigation simulator to be mounted in Galati at the Instruction and Refresher Centre for Workers in the Merchant Marine, is under study.

The question of the radar simulator is that of generating a radar picture very close to the real one considering the configuration of the shore, the ships navigating in a certain area. It can simulate a limit situation in a lock, a convoy, a narrow passage, an incident with serious results. This is a navigation simulator because it has at its disposal not only radar images, but also manoeuvre possibilities so that the trainee could be conditioned in conditions of safety. The difficulty of this simulator consists of processing a large quantity of data over a short period of time, which led to the creation of a specialized computer.

The naval machine simulator starts from the real configuration of a main control post or a ship's engine with all apparatuses and signalling that really exist, and from a room simulating the engine room of the respective ship. According to the role of the lesson, the sailor-student can be placed in various circumstances starting with the above off, the cruise and the

meeting. At any moment, the instructor can create states of malfunction which the student must learn to solve. The main idea of this instruction method is not to teach the student but to train him. The simulator has in view the subjects' training in order to create prompt responses according to the given situation, in the complicated process

of analysis and decision making. A sea cruise, for example, can last for weeks and can be without difficulties, but it is also possible that at a certain moment, a malfunction could come up, and a poorly trained navigator could react either too late or make mistakes. The gravity of these situations increases in the case of critical zones.

## BEHIND THE MIRAGE

From the technical point of view, a simulator is very complex product whose creation starts with a minute analysis of equations describing real processes. From the mathematical viewpoint, told us eng. Iuliu Barbo, simulation needs are even more complex than those of the ship's designer. In general, the designer is interested in the analysis of maximum values, of the apparatus functioning at maximum values, while simulation must cover a whole functioning domain, from the stopped vehicle to the vehicle in the most varied situations. In order to cover this complex functioning range, the specialist tries to find a set of equations which should describe, and continuously solve all situations; this is the mathematical model. The second difficulty is that of finding a computation way solving this mathematical model in the real time, the one in which the phenomenon takes place in reality.

Because the mathematical description of a process happening in a second can sometimes need half a day of computation. The effort is therefore of synthesizing the mathematical description with the carrying out of the process, an essential thing in the case of a simulator. There are several ways of solving this problem. The first is to find algorithms which should simplify the model; the second is to use a powerful computer and the third is the creation of specialized computers.

The third research field in the domain of simulators comes up after solving the mathematical model and the respective equations, when equations very close to the real ones must be created for the navigator. The researchers are using at present only three of man's senses (hearing, sight, kinesthetic feeling), the taste and smell not being simulated yet. In fact, most of the data received by man are visual; some from the board equipment, the other from the surrounding landscape. And while the simulation of the board equipment is a simple technical problem, the simulation of the landscape by one of the most delicate problems in the simulation technique. At present, the collectively we are writing about tries to electronically improve synthesized images for flight simulators. The next stage will be the achievement of a complex navigation simulator where the introduction of specific radionavigation equipment and later through the creation of the image. For the simulation of auditory sensations, electronic synthesis systems are exclusively used at present. The simulation of kinesthetic feelings involves power hydraulic actions correlated with the generation of vibrations. All these elements are computer controlled.

For the creation of the naval simulator, the mentioned collectively collaborated with the Computer Technology Institute and other specialized units, among which there is also ICPTONAV. Mention must be made of the fact that this achievement is owed to a multidisciplinary collective, one of the youngest to the institute, devoted to more performance researches and which has researchers like engineers Dorin Dumitrescu, Nicolae Nicolae, Bogdan Popescu, Nelu Stănilă, mathematicians, acousticians, specialists in hydraulics, informatics, mechanics, optics, psychology collaborate with this team. They have a decisive role in the period of analysing, and specific activity of the people instructed and in the last stage, the improvement of the simulator.

MIRELA ROZNOVEANU

The photo on this page shows how the training of future navigators on the simulators designed and built by Romanian experts









## THE HARMONIOUS DEVELOPMENT OF ALL THE COUNTRY'S REGIONS THE DYNAMICS OF A BALANCED DEVELOPMENT

Buzău county, which was created two decades ago following the country's territorial-administrative reorganization, caught up rather quickly with the whole country's impetuous development pace. A poorly industrialized region twenty years ago, Buzău county now holds a top place in the manufacture of a number of products of major importance to the national economy. At the end of last year, Buzău municipality (the county seat) by itself turned out the whole production of 1968 in less than one month. In fact, each sector of economic and social

life displays a dynamic development. The volume of sales to the population has increased five times during this interval. Nearly 30,000 flats have been erected in the county seat, the number of shops has doubled, very much like that of educational establishments, health care units have tripled, and the number of physicians has grown 2.5 times. Creators and beneficiaries of culture become ever more numerous with every passing year. The pulse of a new life has left its imprint on the destiny of these places.

competitiveness therefore for efficiency, has called for a continual modernization effort. After a collective within the enterprise participated in the Song to Romania National Festival with an invention — the manufacture of the tubular electrode — now this invention has materialized in a new production unit. The first 30,000 tons of wire belong to a sentimental history, a history which those who witnessed and were involved in this continual modernization effort evoke in moments of respite. In the decisive year of the on-going quinquennium, the enterprise produces, apart from Romania's entire metal cord output, 80 per cent of her welding electrodes, 85 per cent of her welded gauzes, and 50 per cent of drawn wire. We can say therefore that the work of the people here is linked by thousands of lasting, resistant threads, to the work of all creators in this country.

Without being synonymous, craftsmanship and ingenuity have a common denominator: they are qualities specific of man. Craftsmanship presupposes a number of skills mastered to the highest degree, and ingenuity involves one's creative resources. We often exclaim before a special-looking object: what craftsmanship and ingenuity! Well, looking at the gigantic containers made by the Buzău Enterprise for Technological Equipment, you cannot but invoke the same qualities of their makes — craftsmanship and ingenuity. As much as 50 per cent of the enterprise's output is exported. Uniques, small- and large-series products are well-known in the USSR, Iran, Syria, Egypt, the GDR, Iraq, Albania etc.

In a monograph of the enterprise, a survey of industrial traditions in Buzău was attempted. In 1925, the first mechanized workshops, employing less than 20 workers, were set up on the site of the present enterprise. The structure of the modern

enterprise of today became that in 1970. A comprehensive programme of measures aimed at boosting labour productivity, the efficiency of its whole activity, led to the modernization of technological processes. Moreover, the promotion of mechanization and automation makes possible a 163 per cent increase in labour productivity. The metal sheet and the wire that require the most and precision of a jeweller while the execution in time of large number of unique models allows the ingenuity of the entire collective.



The pictures on these pages feature instances of the new architecture harmoniously blended with classical architectural elements. The Buzău Enterprise (Unităţile Industriale Buzău) is a large industrial plant, the wool spinning mill and the field of sources in the Buzău district. In the Buzău district, the most dynamic development

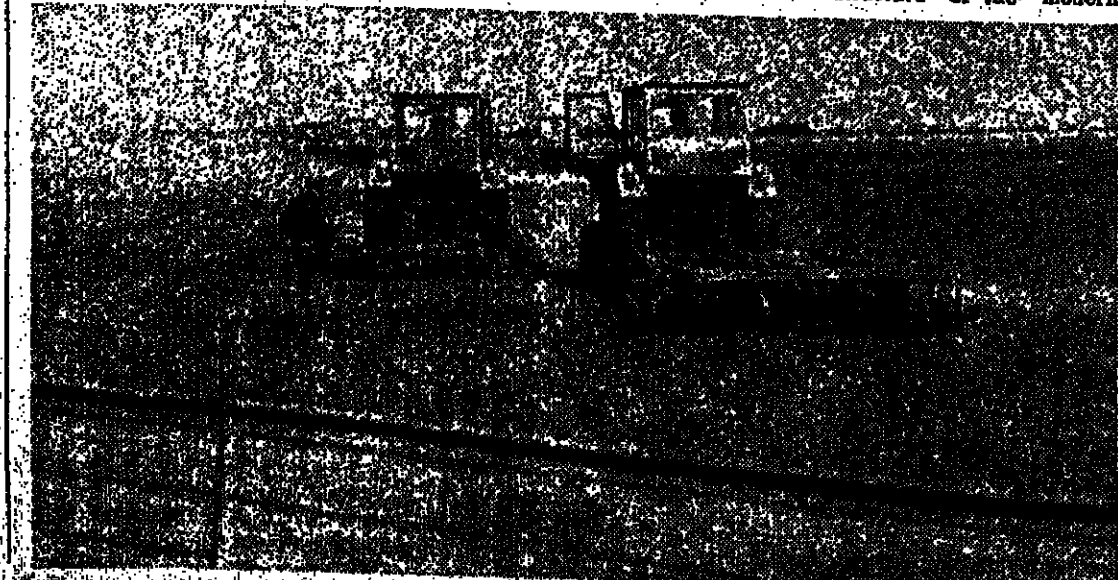


## THE IMPERATIVES OF MODERNIZATION

The industrial area of Buzău municipality comprises a number of enterprises of national relevance. The town with its boulevards and squares where architectural harmony points to an inspired combination of tradition and modernity is continued with the industrial area, a true young heart of the locality. The Enterprise for wire and wire products had the honour of being the first major economic unit in Buzău's industrial life. Its first installations were started up in 1925. Compared to that year, when only 30,000 tons of wire were produced, today's enterprise can be considered a true giant of the Romanian iron and steel industry. Its last facilities were put into operation at the beginning of this decade. The enterprise's current products are on a par with similar products in the world market. Among them is the most highly processed metallurgical product: metal cord. For more than two decades, the Buzău enterprise has been manufacturing metal cord of finer than a spider's web.

yard, steel undergoes complex processing. The enterprise produces all types of metal cord used worldwide in the tyre manufacturing technology, the steel cord has fully demonstrated its

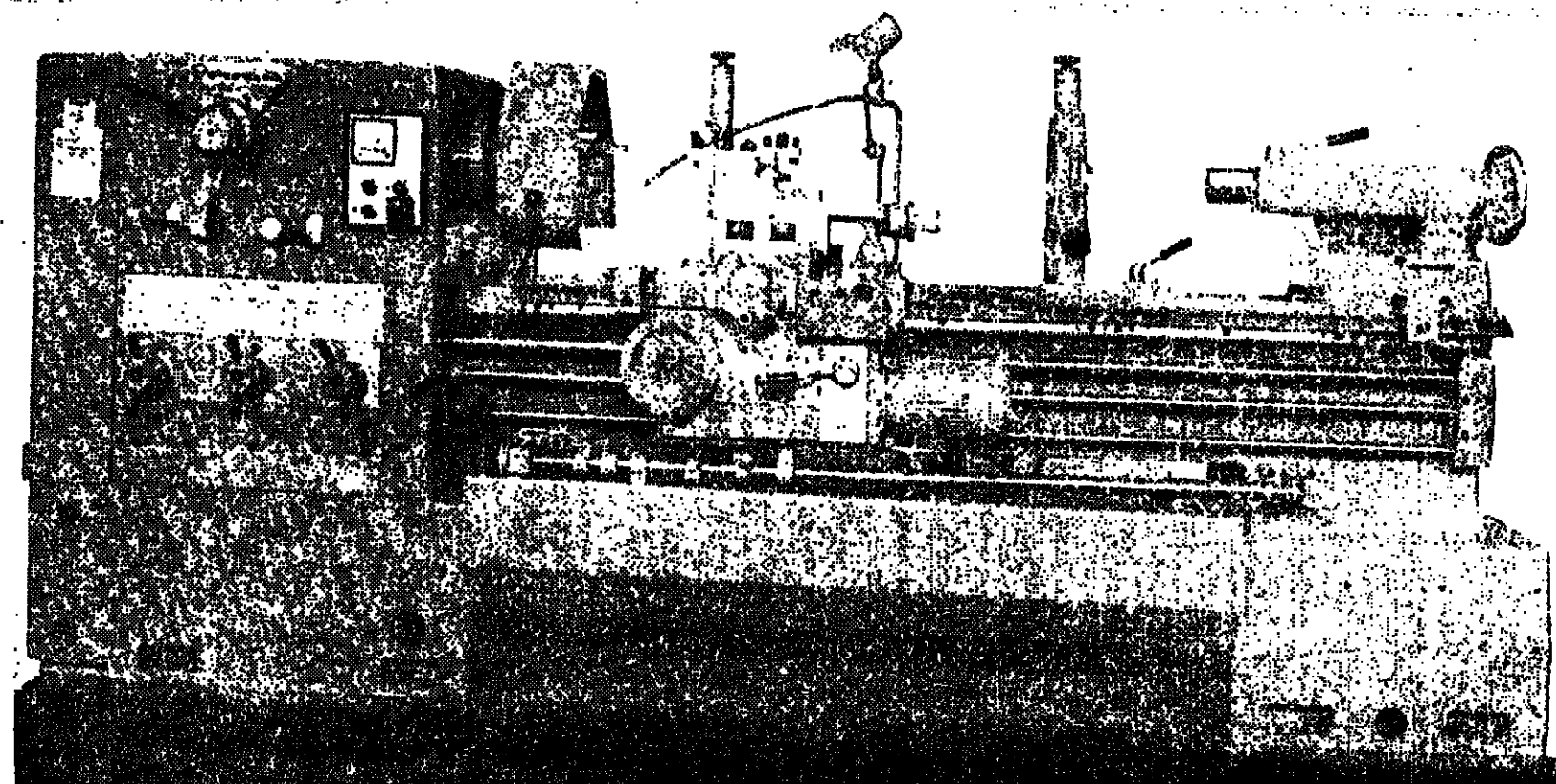
efficiency. As part of the enterprise's modernization drive, one is envisaging to control the manufacture of metal cord by means of a process computer. The struggle for quality and



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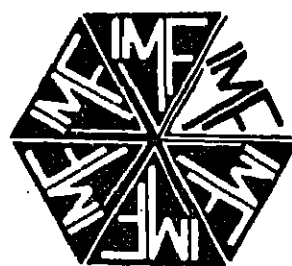
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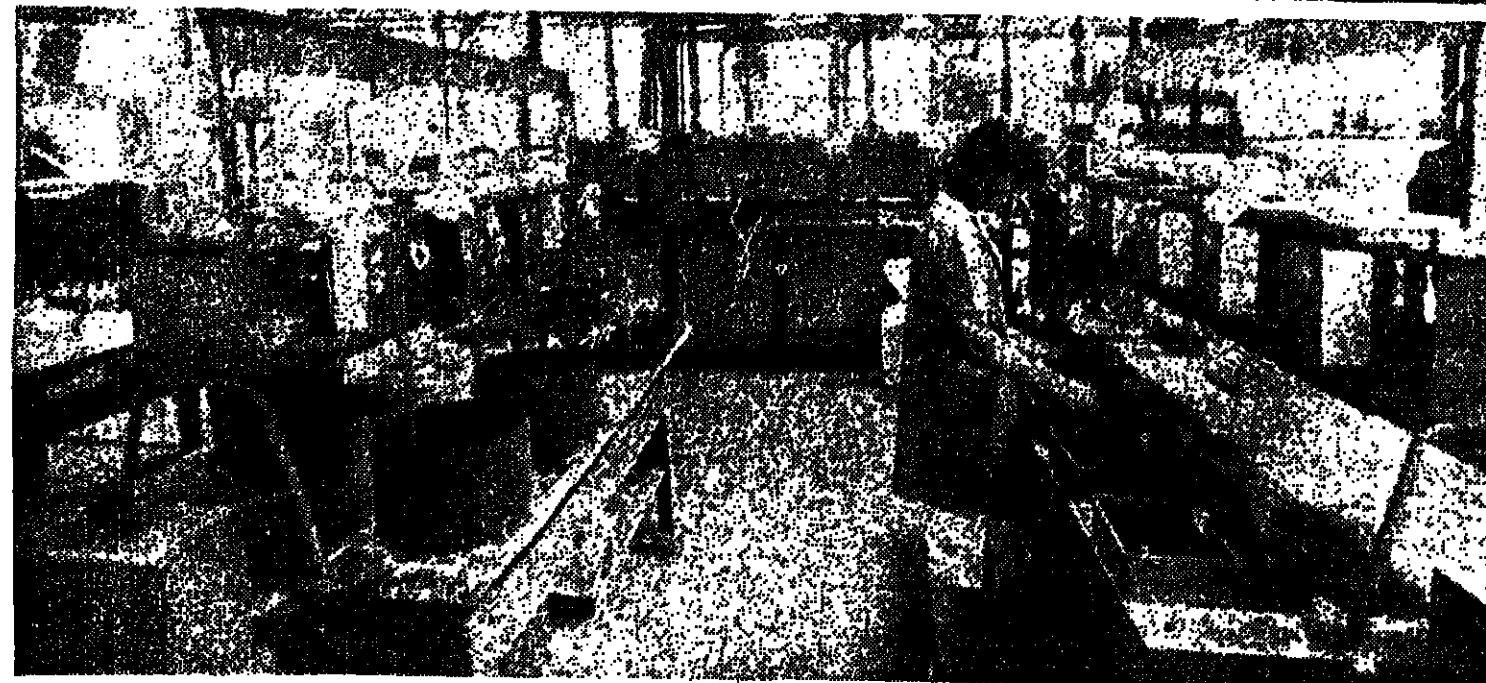


# THE FINE MECHANICS ENTERPRISE



The Fine Mechanics Enterprise of Bucharest, one of the big producers of measuring and gauging fixtures in Romania, offers high-accuracy devices for the measuring of external, internal, circular and flat dimensions, gear, surfaces and angles. Its manufacturing programme includes dial gauges and micrometer calipers with dial indicator, direct-reading and comparison measures

for bore-holes, passmeters and level micrometers, thickness measuring devices, gear pitch error and thickness measuring fixtures, protractors and supports and accessories for these devices. Length measuring devices meet world quality standards and can compete with similar products made by traditional firms.



ensure dimension accuracy, economy of time, giving automatic orders according to the programme.

The vocation for top performance in the twelve enterprises of the CIMF is solidly grounded on the activity of its own Institute of research, design and technological engineering for fine mechanics and tools. A real centre of technical and technological creation, the Institute supplies ideas and solutions to productive departments staffed with high-skilled workers and technicians able to impart the highest quality to each product. The direct relationship between research and production, the continuous flow of information between those who design and those who execute provide the guarantee for the high technical level and accuracy of the measuring and control devices produced by the CIMF enterprises.

## MEASURING AND CONTROL INSTRUMENTS

### MEASURING AND DIMENSIONAL CONTROL INSTRUMENTS

- dial indicators
- bore checking and control instruments
- comparator instruments
- gear measuring instruments
- angle measuring instruments and apparatus
- surface measuring instruments
- supports and accessories for measuring instruments

### APPARATUS FOR ACTIVE AND PASSIVE CONTROL BASED ON MODERN PRINCIPLES

- active control instruments for universal and surface grinding machines
- passive control instruments with electric contact and pneumatic transducers
- electronic apparatus for rugosity control

The range of products includes 536 distinct families totaling some 22,000 standard sizes. Of them, 90 families of products have been assimilated of late, the share of the new and redesigned products being of over 20 per cent.

In order to achieve its programme, the Fine Mechanics Enterprise adopted and improved the latest technologies specific to each family of products. One of the many possible examples are the diamond wheels with galvanic bond for processing a wide range of materials. Starting from the technology bought from the Winter company of West Germany, the Fine Mechanics Enterprise has achieved almost twice as many families of diamond wheels than the licence initially contained. Among its performances we could mention the wheels for the electronic industry used for cutting integrated circuits, transistors and thyristor plates. The width of the cut is only 0.26 mm, which substantially reduces the waste of expensive materials resulting from cutting. We could also mention the diamond wheels with galvanic bond used for cutting synthetic resins, the wheels for processing sintered metal carbides, etc.

The fruit of the Fine Mechanics Industrial Centre's creative efforts is the active control devices used on machine tools, devices equipped with blue and red



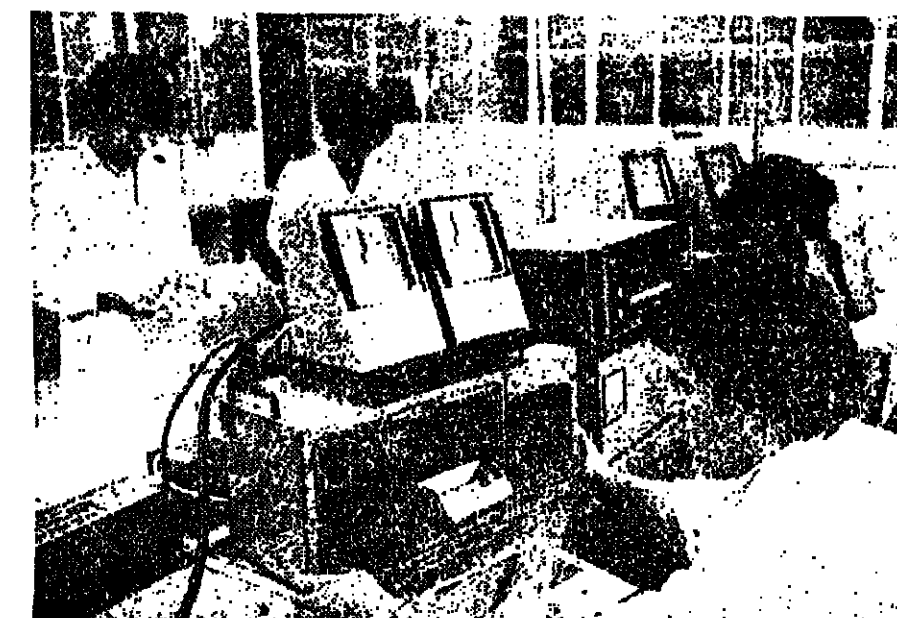
# REMEMBER THE IMF TRADEMARK



IMF is the mark you can see on all products turned out by Intreprinderea de Mecanică Fină (The Fine Mechanics Enterprise) in Bucharest. The fabrication programme of this enterprise which is one of the most modern in Europe includes the following groups of products:

• apparatus and mechanisms of industrial horology • apparatus for the control of thermotechnical magnitudes • automation elements for regulating pressure and temperature • tools, devices and matrices • products of sintered metal carbides.

Superior accuracy parameters, high technical standard and complexity, a wide range of applicability, endurance, highly efficient constructional elements — these are some of the features boasted by the dimensional control and measuring instruments and apparatus and of the tools bearing the IMF mark. Do not forget: they impart superior functionality, maximum safety of operation, great productivity to your machinery and installations, and a high quality to your products.



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- diamond tools for processing grinding stones
- diamond wheels with metal and organic bonds for processing hard and extra-hard materials
- metal-bonded diamond tools for special processing
- diamond drawing dies
- diamond pastes

### ON THIS PAGE:

- vertical micrometre with electronic counter
- electronic speedographs for locomotives
- impulse electronic counter for counting machines
- projector microscope checks

### ON THE ADJOINING PAGE:

- View from the galvanic workshop of the diamond tools section
- View from the length measuring and control apparatus section



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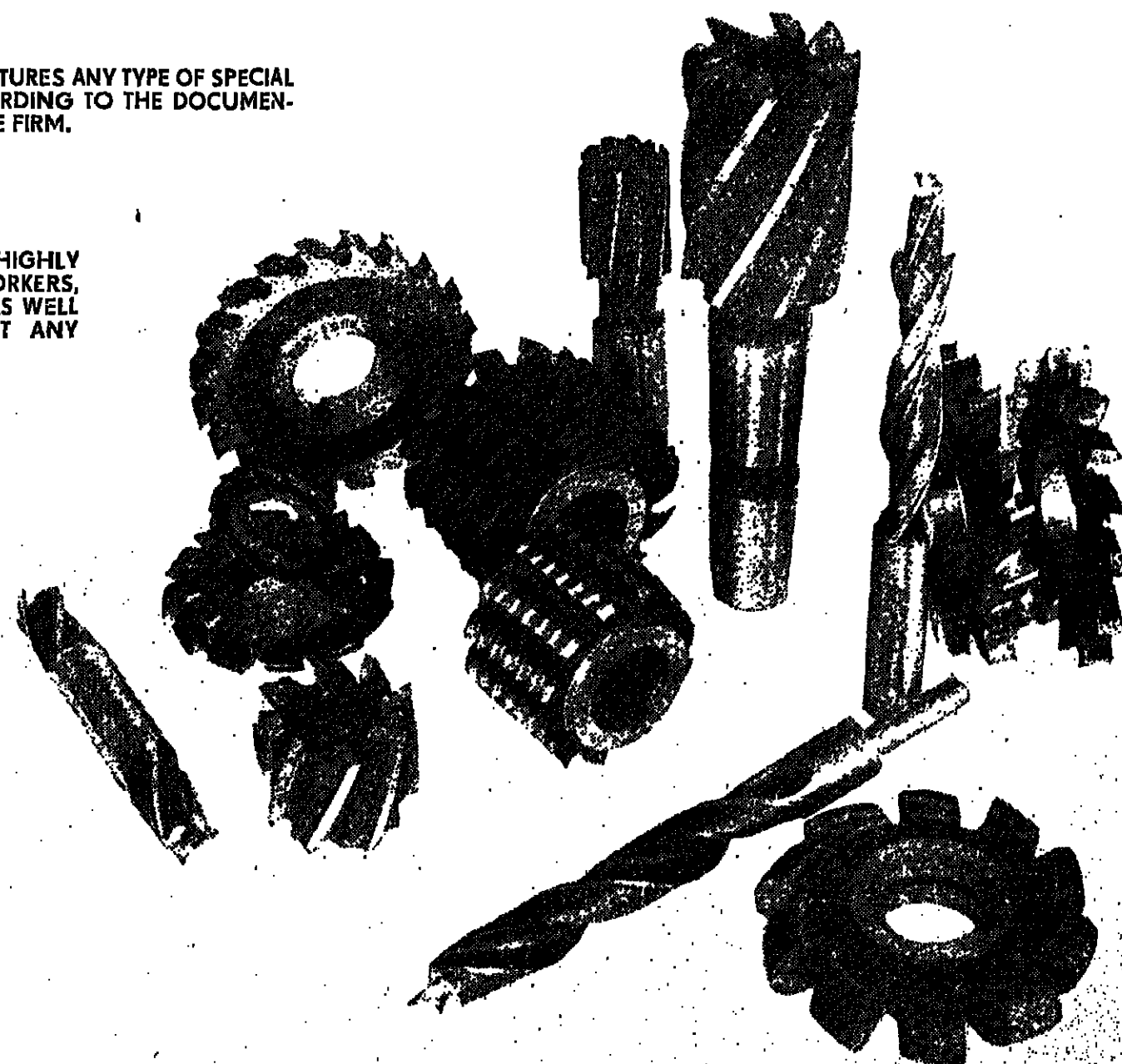
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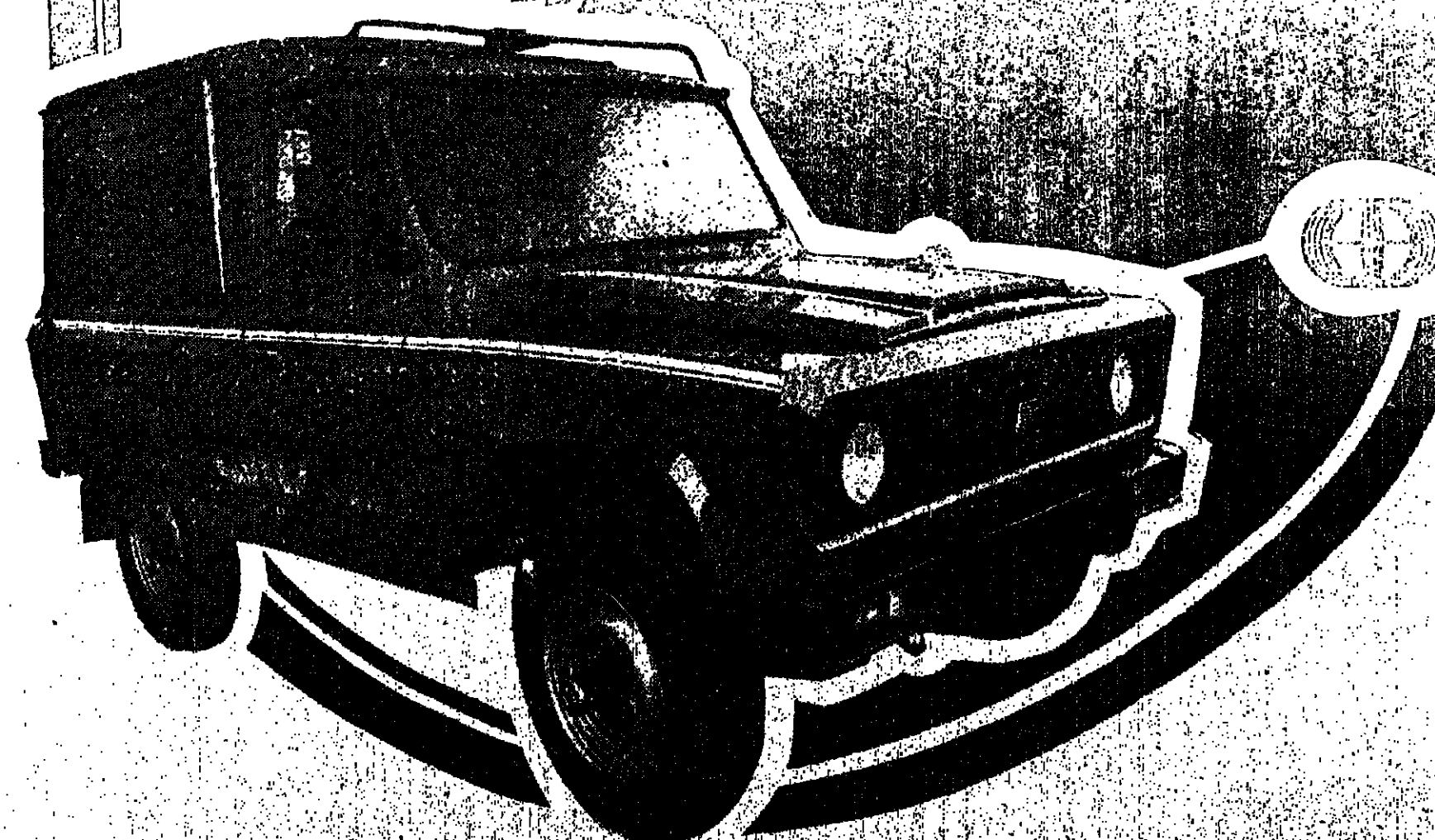
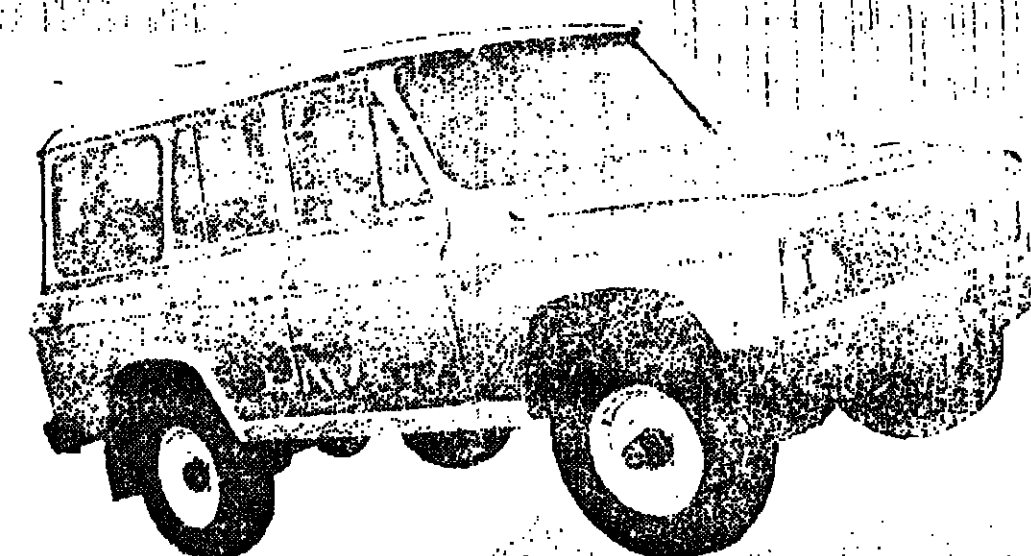


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— Telecommunication apparatuses and equipment, servicing included, starting from design up to training and maintenance. From this line of products mention should be made of: telephones, urban, interurban, international and institutional automated telephone exchanges. Exports of such products to Greece, the USSR, Czechoslovakia and the GDR have become a traditional practice.

— Measuring and control apparatuses, of which ampermetres, voltmeters, wattmeters, electric metres, flow-metres, steam-flow metres, logometres are delivered to Poland, Syria, Iraq, Pakistan, Sudan, the GDR and Czechoslovakia.

— Automation elements, equipment and installations for all the economic and social sectors.

We shall enumerate some subgroups of products: field and panel automation equipment, distribution and control electrical equipment, automated equipment and systems controlling technological processes in all economic branches, transmission and data processing equip-

ment, teletransmission and data processing equipment, machine tools, control equipment, automated testing equipment.

Also on offer are personal installations and equipment as well as turn-key deliveries. Increasing are the deliveries to countries such as the USSR, Egypt, the GDR, Czechoslovakia, Iran, Iraq, Bulgaria.

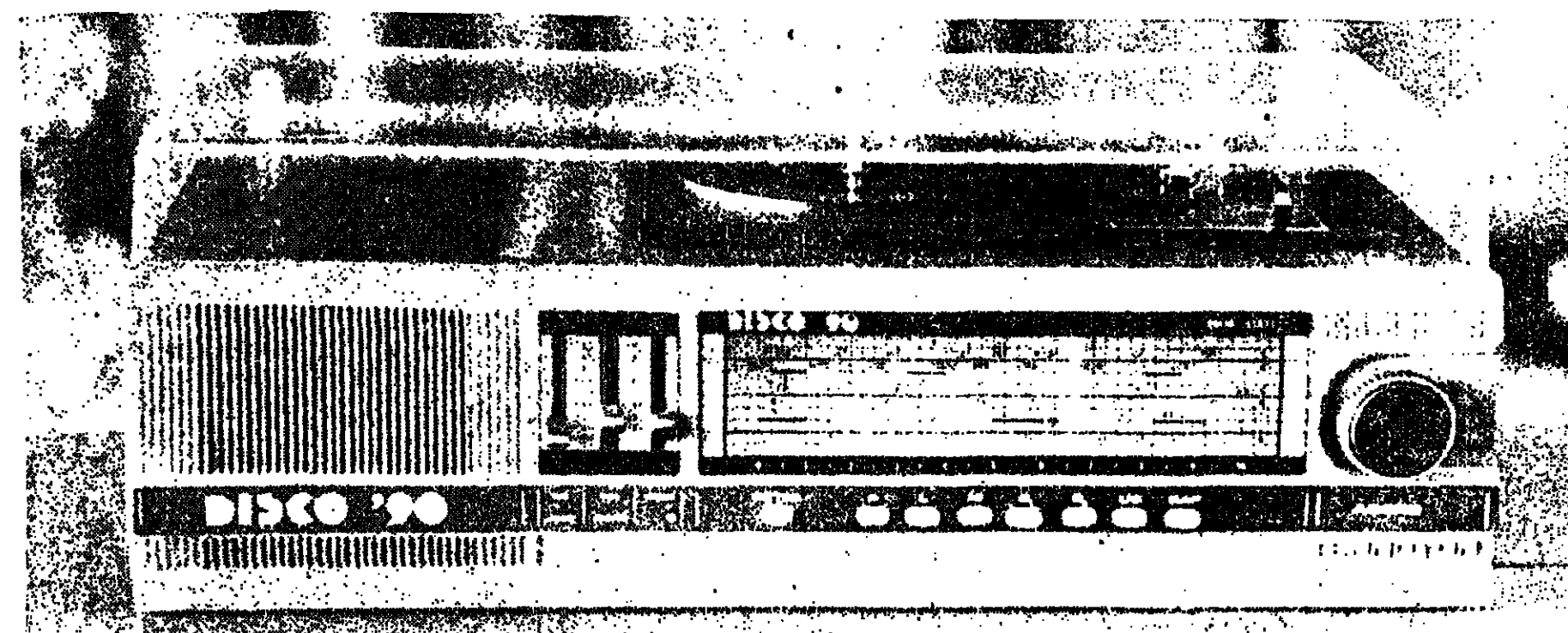
— Computer technology equipment such as: medium-capacity computers, minicomputers, microcomputers, personal computers, graphical systems, invoicing and bookkeeping machines, peripheral equipment. These products are exported to People's China, Czechoslovakia, the USSR, the GDR, Switzerland, Austria, West Germany, the USA.

The electronic components cover a wide range of diodes, transistors, integrated circuits, resistors, condensers, etc and are exported to Bulgaria, Czechoslovakia, the GDR, Poland, France, Italy, the United States etc.

Consumer goods such as radio receivers, radio cassette recorders and tv sets. These products are exported to countries such as West Germany, Britain, the Netherlands, Czechoslovakia, the GDR, the United States.

Also taking place through ICE ELECTRONUM are the export of licences and knowhow, the granting of technical assistance and software.

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BUCHAREST - ROMANIA



ICE ELECTRONUM imports a series of equipment, apparatuses, electronic components and various materials for the electronic industry and audio-video consumer goods.

An important partner in the export and import conducted by ICE ELECTRONUM is the Soviet Union.

ICE ELECTRONUM — Bucharest collaborates with the Soviet enterprises V/O ELECTRONORGTEHNICA, V/O STANKOIMPORT, V/O MASHPRIBORINTORG, V/O TECHMASHEXPORT, ENERGO MASHEXPORT, V/O TEHNINTORG, V/O

Supplied to the USSR are adjustable drives for machine tools, automatic telephone exchanges, computer technology, while that country exports to Romania electronic components, technological equip-

ment for the electronic industry, computer technology and audio-video consumer goods.

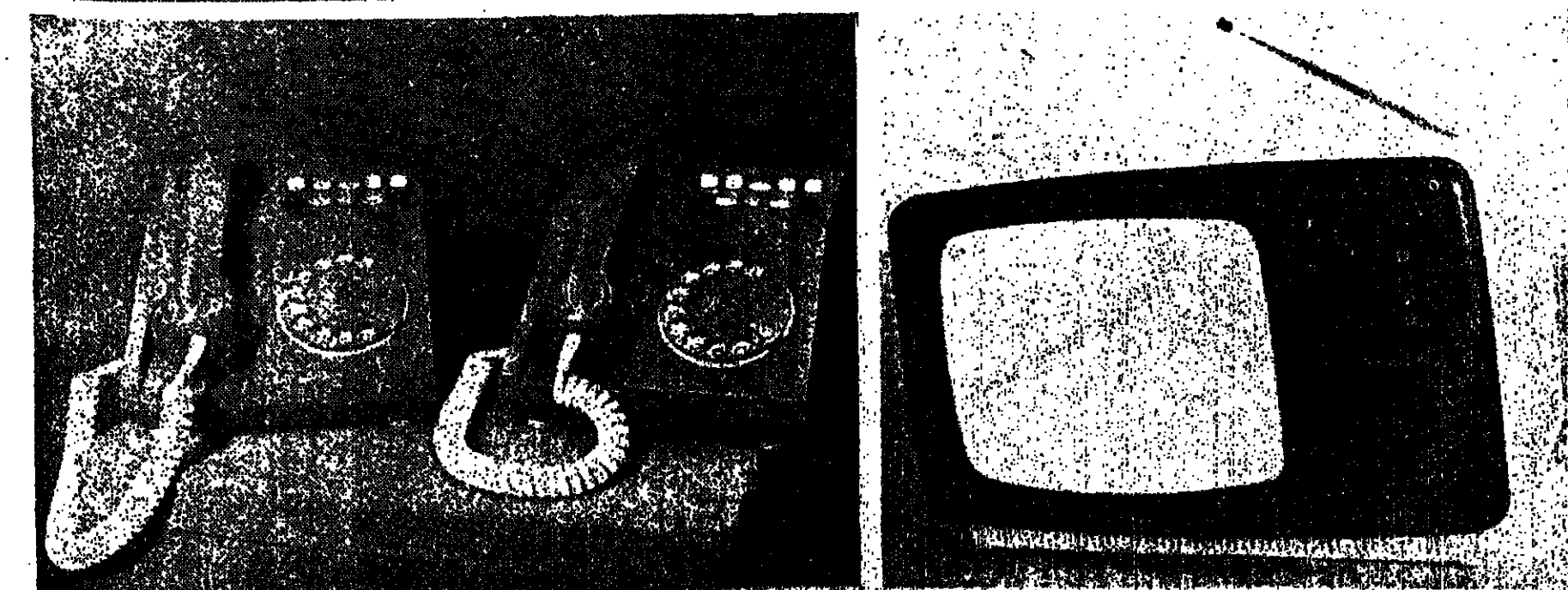
The collaboration with the Soviet foreign trade enterprises also accounts for the cooperation in production, that is Soviet electronic components are used in manufacturing electrical drives, computer technology equipment and automated telephone exchanges to be delivered to the USSR. At the same time very important is the ob-

servance of all delivery dates, especially as concerns the electronic components which are vital to the rhythmic realization of the equipment production plan.

According to annual mutual exchange protocol stipulations, the volume of the exchanges between ELECTRONUM and the Soviet foreign trade enterprises is set to grow every year.

For further information please contact our specialists.

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## THE CONDITION OF A VILLAGE

Brădeanu is a village in the Buzău Plain numbering more than 1,000 inhabitants. On this sunny day in early spring, the village was looking its best, with well-kept yards and plots of land waiting for the first nursery transplants. As the village lies in the path of the shepherds descending from the mountains to the Danube's marshes, transhumance left deep marks in the residents' material and cultural life, marks which lend this locality a strong individuality among rural settlements. And if the people are fond of this legacy, this is yet another expression of their love for their native place.

I listened to the chairman of the local producer cooperative farm, engineer Ștefan Năzor, speak about the best Chernomors, a soil which even in droughty years, and without irrigation, yielded 5,000 kg of wheat, eight tons of maize, 50 tons of sugar beet. But the pride of the Brădeanu farmers is vegetable growing. More than 70 per cent of production in this sector is exported. It is natural

therefore that personnel training should be a real concern in this commune. Alroca Dumitrescu, the commune's mayor, declared that during the winter 22 young graduates from the local school were enrolled in order to be trained as farm machine operators. The village trains specialists it needs so that the productive potential of the soil may be turned to the best account. And this concern is only a still, defining the present conditions of the village. I also learned about other achievements of the village. The water charge necessary for all households was ensured by deep drilling.

The small industry and public services turn out a production worth over one million lei. The existence of a dispensary for people and another one for animals, three schools, three houses of culture, libraries comprising 23,000 copies offer the true image of the village's social and cultural life. Brădeanu is a village lying in the Buzău Plain which welcomes spring with wisdom and good management.



## THE VERTICAL OF A CITY

Rimnicul Sărat could have remained a place where nothing ever happened. But things worked out differently because an apt of this Romanian land has been left untouched over those years. The patriarchal aura of the old borough can still be found in the architectural style of some buildings. Well converted, the railway station dates back to the time when the railway was built. Besides the old edifice the constructions of the young town speak about the present life of the people.

Suffice it to mention that Rimnicul Sărat produces now the output of 1968 in only 25 days. Documentary attested in 1969, Rimnicul Sărat developed at a slow pace until two decades ago. Even some of the older enterprises such as the cigarette enterprise, the ready-made clothes

factory and the mineral oil salvage plant have been modernized, expanded through new production units. One hardly known except for its various types of cigarettes, the town has come to hold the priority in certain fields. The enterprise of brake facing and joints turns out the whole range of joints for cars, clutch disks and wheel drums. The only enterprise of its kind in Romania, it has brought about important changes in the town's life. Whereas a few years ago workers had to go abroad in order to specialize in the com-

misbouting of this plant, now a high school prepares highly trained workers. New professions are learned by the town's youth. Engineer George Tănasea told me about the capitalization of technical intelligence within the enterprise. A collective of workers and engineers devised a new type of filters based on home-grown research. With a checking capacity of 98.4 per cent and an automatic shaker system by means of pneumatic vibration and mechanical discharge of the receiving bin, the



## A PEASANT AND AN ELITE FARM

Along the years Dinu Gheorghe, chairman of the cooperative producer farm in Smeeni, has been visited by many people, including cultural and artistic personalities. They have come to meet him, to talk to him, to see the achievements scored by the farmers of Smeeni. Uncle Dinu received them all with the hospitality of a good manager. Their interest stimulates in him the calm joy of a man who can share some of his experience with others. Even if he did not speedily comprehend his profession of a farmer, his physiognomy would betray him. It is not just the face or stature which betrays him, but mainly the ironic sparkle in his looks.

My visit interrupted him while he was busy. He was checking peas before sowing. Like any peasant, he rejected the early spring weather; quite suitable for sowing, the same as he relishes reading a good literature book going to his heart. Dinu Gheorghe was visited even by writers who were amused to learn how much a peasant could read. Not just agricultural and zootechnical books but also recent releases of works by world

classics are piled on his desk. More than two decades ago peasant Dinu Gheorghe was elected chairman of the Cooperative Producer Farm of Smeeni. And he has continued to lead the destiny of that unit preserving his quality of a peasant, of a son of the land. Now he prides himself upon the elite farm where anybody can admire a beautiful achievement of Romanian animal husbandry. Cattle belonging to the Bruna of Maramures breed are capitalized to their full capacity. The almost 4,000 l of milk gathered from every foddered cow prove that the race has managed to adapt itself even to the plain. It is quite a delight to visit such a farm. Cemented alleys lined by burgeoning vine stalks, modern stables, substantial reserves of well managed fodder, give you the image of work done properly, showing the farmer's true passion for animal breeding. In fact Dinu Gheorghe confessed that it was no easy task to reach such a level. "Not just anybody can work with us in animal breeding," he told me trying to call my attention to the qualities of those who work in this field.



new type of filters eliminates pollution. According to their own researches, the same enterprise produced a new type called 1002, 488 from which break joints for tractor will be manufactured. The new product helps out the import and increase the reliability of break joints. It is not the only product ever homologated here. For a couple of years beneficiaries have familiarized themselves with mortar, used for the production of break joints, resistant to various environments, pressure and temperature. I was explained that the main bodies from short of material of Rimnicul Sărat. Thus the town enters the world circuit through the fame of its products, of its elements of civilization manufacturing.

MARILENA TUTILA  
Photo: DORIN IVAN





The science of electrics was called to have its say on curing at the Electro-Optic unit of Hologram. Engineers designed a complex machine tool selecting active seeds from inactive ones. Through an original and ingenious technological chain, condensers, transistors and potentiometers can "feel" the fruit still dormant in a seed and make an efficient and efficacious selection.

## PERFUMES AND VITAMIN E

The Organic Chemistry Centre (CERCIM) of the Central Chemistry Institute shows a permanent concern with fine organic synthesis which turns a raw material of simple structure and small value into complex products of a high processing degree and value. The team of experts headed by engineer Gheorghe Mihai has worked out a technology for processing vitamin E, which is very useful for maintaining the trophism of the human body and enhancing the animals' reproduction capacity. Having a prelitigious molecular architecture, this vitamin can be synthesized through a seruporous, step-by-step construction in order to choose the best chemical structure from the points of view of economicness, profitability and of the possibility to use domestic raw materials. The Romanian experts have passed a tough test of scientific maturity, harmoniously blending oxidation, alkylation, reduction and substitution reactions (nearly all of chemistry's chapters) conducted in conditions of powerful cooling and heating, of vacuum and overpressure, with various catalysts. Thus, Romania has become one of the procedure authors. We should also mention the 18 original technologies of obtaining perfume devised by a team headed by engineer Mihai Eitan, some of which are applied on the existing installations.



## BIOTECHNOLOGIES

Secondary cell recovery biotechnologies are currently being tested as part of the ICEDOL programme. Bacterial strains have been obtained of which, in special media, have led to a substantial increase in the final crude recovery factor. Microbiological technologies have been developed for processing pharmaceuticals, animal breeding and food technologies. Enzymatic complexes have been developed for regulating fermentation processes, preparing cheese, juice, etc.

## PATENTS AND INVENTIONS

From the State Office for Inventions and Marks, we received the following account made by engineer Ion Marinescu, director of the Office:

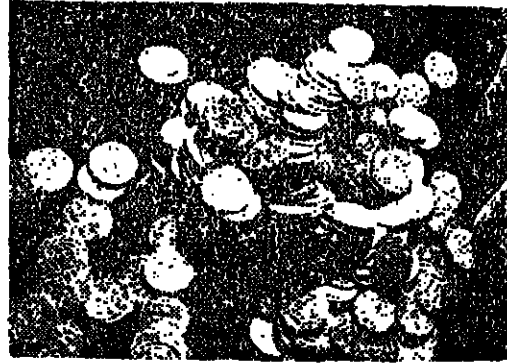
"To our satisfaction, most of the applications for patents made in 1987, the same as over the last years, met the priority requests of the national economy. Under the permanent guidance of the National Council for Science and Technology, last year, the activity of informing the enterprises and economic units about new patents was expanded. Practically over 30 new patent libraries have been set up in the country and the national collection of inventions from 23 countries, increased to 21 in the previous year, reaching a total of 31.1 million patents.

On the basis of a programme elaborated by the National Council of Science and Technology, having in view the application of inventions and protection of the identification and protection of the invention patents of all the original inventions, the number of applications for patents and inventions registered last year topped 5,000, a record for Romania.

Other researchers of archaeological interest, carried out with the Tandem particle accelerator, one of the few instruments of this kind existing in Europe, for radiocarbon dating of pieces of great historical value. Romanian archaeological engineering by means of the particle accelerator also in the field of investigation of ancient history cradles. The books have been devoted for magnetic properties by means of the particle accelerator magnetometer in the Bucharest Institute for Nuclear Physics and Engineering.

## ARCHAEOLOGICAL ENGINEERING

Romanian archaeological engineering specialists are conducting intensive research aimed at turning to scientific advantage the national museum patrimony and bringing to light new hoards and material traces of the civilizations which succeeded one another on the country's territory. Recently, the gold coins of the Byzantine Empire dating from 181-1300, which was unearthed in Tulcea county, have been analysed by means of the nuclear reactor, the cyclotron and X-ray fluorescence. One could thus determine the evolution in time of the analysed coins, their gold content and the metal's origin, which provided important clues as to the Byzantine monetary policy. It has been proved that attributing the coins to a particular issue on stylistic grounds alone can lead to errors. The X-ray fluorescence analysis, for instance, offered data on the year the treasure was buried and the probable composition of its owner. Studied at present are coins of the Roman denarius type from the 1st century B.C. Other researchers of archaeological interest, carried out with the Tandem particle accelerator, one of the few instruments of this kind existing in Europe, for radiocarbon dating of pieces of great historical value. Romanian archaeological engineering by means of the particle accelerator also in the field of investigation of ancient history cradles. The books have been devoted for magnetic properties by means of the particle accelerator magnetometer in the Bucharest Institute for Nuclear Physics and Engineering.



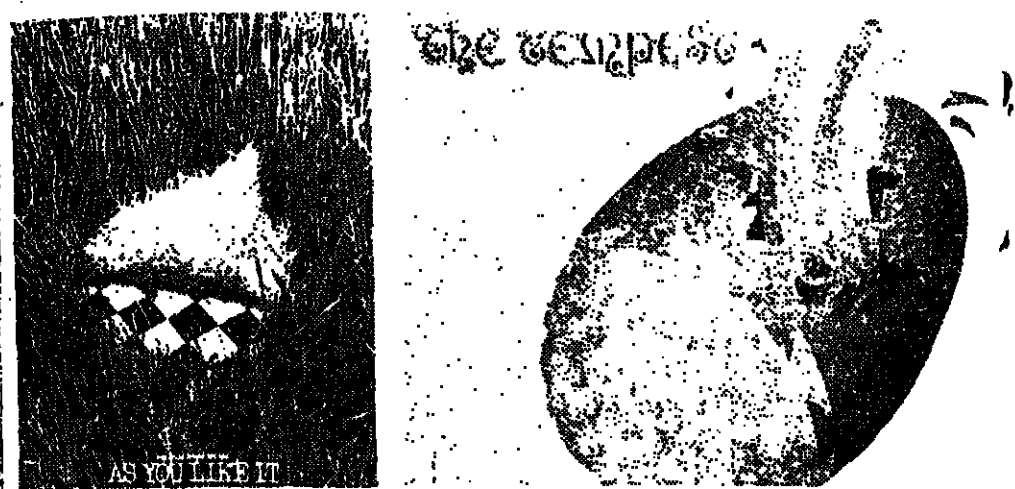
## INDUSTRIAL ROBOT

Among the Romanian achievements of technical physics recently homologated, mention should be made of the laser for drilling equipment and for machine tools extending rock perforations as well as for channel excavation installations. A creation of the Institute of Physics and the Technology of Radiation Equipment, the laser called "ELAC" has a special guiding precision and a great reliability in conditions of building sites. Among the new ultrasound installations, mention should be made of the TM-02 generator (transducer for cleaning electronic, mechanical parts, as well as the D-2 sound disinfection unit for researches in microbiology, chemistry, botany, etc.). RIV-1 industrial robot made by the Institute of Physics and Material Technology has five degrees of freedom and a control system with dynamic movement. It can be used in the building sites, wood processing and ceramics industries.



## TRANSISTORIZED NANNY

Several high-tech products meant for fighting diseases have been obtained by the technical-medical industry. Here are just a few: the family of galvanic bathulab filled with a Janzani and a hexagonal body with a big density of bulbs for water heating, patient beds in light and heat. The cellular galvanic bathulab has compartments equipped with electrostimulators for hands and feet. The electronic unit supplying current with this bathulab is of amplitude and frequency regulated by a microprocessor.



## VISUAL AND METAPHORIC

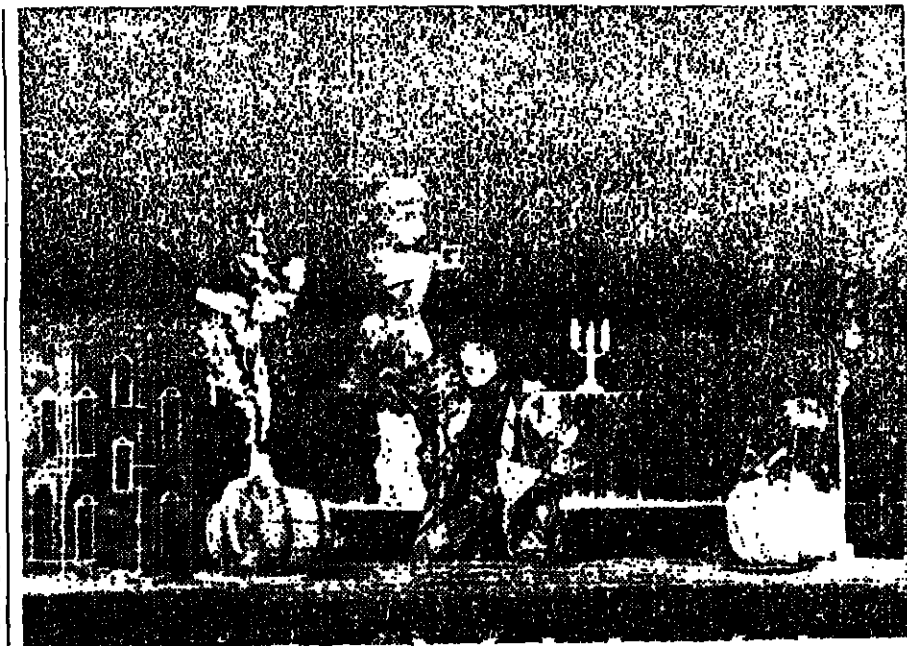
In the Shakespeare exhibition of posters promoted by a unitary theme, opened at the Palace Hall in Bucharest, fine artist Nicolae Corneliu displays the same lucid black and white full of majestic ideas. This is his sixth one-man show: four in Bucharest and two in West Germany (Hofheim and Ueberlingen). His activity can also be illustrated by his frequent participation in many group exhibitions staged here and abroad, where he won prestigious distinctions, such as the first prize at the nation-wide contest of posters (1981), the Romanian Fine Artists' Union prize for black and white, the Diploma for high professionalism and idea at the world contest of posters (Moscow, 1983), the Diploma of Merit at the Arts Directors Club International exhibition (New York, 1987). Highly appreciated was his clever poster in which he enlisted the flags of all countries gathered in the first forum under the form of a unitary vertical zipper (the nation's consensus), for which he received the Diploma of Honour at the UN World Contest of Posters (New York, 1982).

In the present exhibition, the display of apparently simple means of expression amplifies meanings and structures ideas, reconstructing the "Shakespearean universal language" through a new order of visual signs.

GHEORGHE TRAIAN  
Photo: M. CRATOIU

## KEEN OBSERVATION

Wishing to offer heavily lovers anchors solidly planted in the firm soil of tradition, painter Andrei Homescu has not hesitated to unite the group of portraits he is exhibiting at the Orizont Gallery in Bucharest. Recollections about the Artists of the Past. This title points to an implicit tribute paid to some celebrated forerunners, and explicitly stresses the idea of transference or permanence in the iconographic area chosen. In this case the portrait, it should also be mentioned that a possible term of the relation established with the past is the chromatic quality derived from the great residues of the past. The artist does not flatter his models because in fact he paints a mental model. The human face becomes a sign - figurative and clearly defined in point of view - but without the obsession of the analogy of which the painter is capable, as demonstrated by his Self-Portrait in Van Gogh's damned manner, or by a few subtle interpretations that escape expressive distortions. The chromatic regime kept within grave gamuts, with sometimes sumptuous accents of red, gold, or precious blue, alternates with a dramatic spirit which seems to stem from repressed romantic revolt, and with the fulfillment caused by a light effect or by the gravity of a revealing gesture. One can even speak about a sensual plotter, evanescent to the point of suggesting surrealism, and at the same time, very concrete.



## PRESS REVIEW

The Union of Writers' Romanian literary weekly (no. 7) put out excerpts from an essay entitled "Marea (trănească)" (The Great One), signed by critic Mirela Iorgulescu (b. 1915), covering pages of analysis and diagnosis pertinent to the world of classic Ion Luca Caragiale's prose. The critic aspires after correcting the exegetes made so far, according to which Caragiale's characters act under the sign of innocence, doing harm without actually meaning it. It is true, says the author of the essay, that the world of these "heroes" is devoid of the moral sense of sin. However, this happens not out of innocence but because guilt is generalized, everyone is guilty of having done something. "Candour" is not a synonym of harmlessness," runs the article. "This is actually an outcome of the complete annihilation of the idea of guilt." Therefore it is a false candour, a perverse innocence of a world in which everyone knows that no one and nothing has remained uncorrupted. The awareness of one's guilt disappears in a world to which any situation is indistinct. Caragiale's conflicts break out between culpable already proven and culpable still unproven who nevertheless can be provable any time. "This world is fettered by a chain of weakness and cannot live without it" and therefore to such a point of speaking, candour becomes a way of living.

It is a descendant of the family of great observers of human typology as a reflex of a particular inner condition, instinctively turning to advantage a line which starts from Leonardo's studies, passes through El Greco's portraits, through Ensor and Munch, to the expressionist artists. The Union of Writers' Romanian literary weekly (no. 7) put out excerpts from an essay entitled "Marea (trănească)" (The Great One), signed by critic Mirela Iorgulescu (b. 1915), covering pages of analysis and diagnosis pertinent to the world of classic Ion Luca Caragiale's prose. The critic aspires after correcting the exegetes made so far, according to which Caragiale's characters act under the sign of innocence, doing harm without actually meaning it. It is true, says the author of the essay, that the world of these "heroes" is devoid of the moral sense of sin. However, this happens not out of innocence but because guilt is generalized, everyone is guilty of having done something. "Candour" is not a synonym of harmlessness," runs the article. "This is actually an outcome of the complete annihilation of the idea of guilt." Therefore it is a false candour, a perverse innocence of a world in which everyone knows that no one and nothing has remained uncorrupted. The awareness of one's guilt disappears in a world to which any situation is indistinct. Caragiale's conflicts break out between culpable already proven and culpable still unproven who nevertheless can be provable any time. "This world is fettered by a chain of weakness and cannot live without it" and therefore to such a point of speaking, candour becomes a way of living.

## ROMANIAN CULTURE ABROAD

● BELGIUM. As part of a conference devoted to Romania in Brussels, prominent were: significant moments from the Romanian people's history. At the same time, highlights were the achievements of Romanian culture abroad.

● JORDAN. A Romanian folk ensemble displayed a collection of dances, songs and customs specific to all Romania's ethnographic areas.



## "PEARL OF THE CARPATHIANS" SANATORIUM

I have often, in various circumstances, heard a name accompanied by superlative appreciations. I had not met that person but the frequent mention of his name aroused my curiosity.

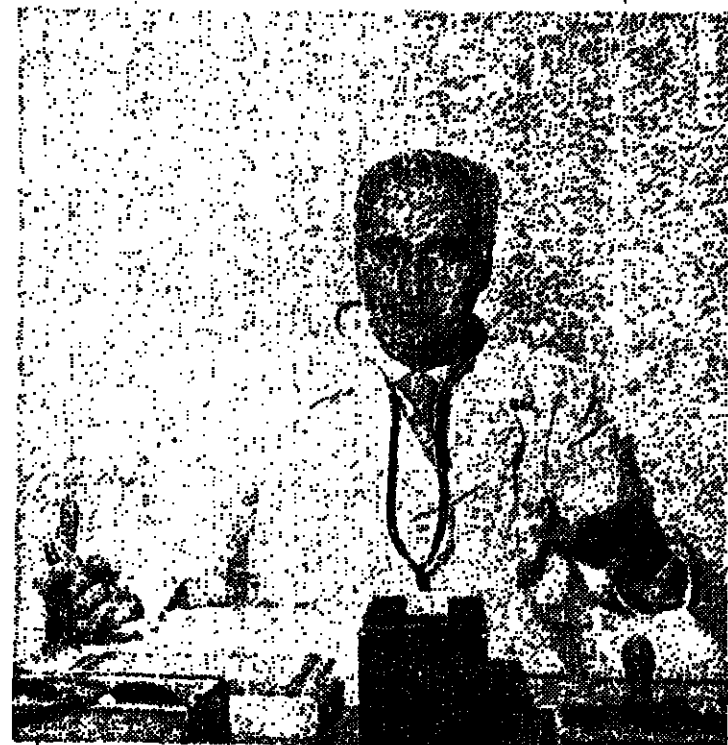
Before approaching him, I used an innocent trick: I turned into a virtual patient and asked Eugenia Popovici (a real patient) which were the merits of the famous Dr. Dinu. "First of all," this physician never checks his watch even though his consulting hours exceed his daily programme. In front of Dr. Aurel Dinu you feel as one of his collaborators. The consulting becomes an occasion

was interrupted by the phone ringing. A patient from the north of the country asked him if... He was given the necessary advice with the same smile... Dr. Aurel Dinu returned to our conversation, emphasizing that the profile of the sanatorium was the treatment of seasonal light neuroses — determined by a certain physical and psychical exhaustion. Sinale — a well known national and international tourist locality — became a balneal resort thanks to its natural conditions: located at the foot of the Bucegi Mountains — 900 m altitude — it benefits by pure, exonerated air with negative ions by a relatively low atmospheric pressure.

sonate once. In Sinale are treated, among others, endocrinological diseases (diabetes mellitus, hyperthyroidism, etc.) cerebral or peripheral circulatory disorders, high blood pressure, and non-evolutionary chronic rheumatism. The patients benefit by a complex physiotherapy and hydrotherapy treatment (plant or fir tree essence baths, infiltrations with "Bocel" — with which Dr. Dinu worked next to its inventor, a few years ago) — and "Adelvit" — another reputed original product; the cure with Magnesiaflux — a Romanian invention treating insomnia and neuroses, psychotherapy and dieting, gym and swimming pools, are only some of the sanatorium's therapeutic means. In the last decade over 15,000 patients (from Romania, France, Italy, Belgium, Holland, England, West Germany, Spain, Israel or Mexico) and over 500,000 therapeutic methods have been registered here yearly.

Obviously, the doctor of internal medicine Aurel Dinu became, after sustained studies, a specialist in balneology. But according to the patients as well as to our convictions, the chief physician of Sinale balneal sanatorium has also excellent knowledge of psychology. The talk we had with him, was beyond strictly statistical data, full of a perceptible tranquillizing effect. We would have continued this discussion but I knew that Dr. Dinu was to leave for Belgium the next day, where he had been invited for a series of medical conferences. Our host did not seem eager to get rid of his guests. I left despite his insistence to stay longer, accompanied by his warm, generous smile which wine and health his patients.

V. COSTEA ■



for discussing the necessity of a certain medication, of balneal and physiotherapy procedures from which you emerge without doubt, substantially calmed. Then we should not forget that Sinale Sanatorium, as it is today is the work of Dr. Dinu, whose calm smile never dies.

These words seemed rather convincing and were amplified during our documentation. The tall, distinguished man could be easily recognized by his ample, equal and generous smile lighting his face. He confessed that there, in Sinale, he had been working since 1981 when he was on probation. His motto? Not bigger than those of his seven fellow physicians in the sanatorium... Our discussion

Views from an ethnographic and folk art museum in northern Romania (Cimpulung Moldovenesc) which treasure valuable ancient pieces gathered along the centuries and preserved in an environment of a remarkable natural and cultural beauty.



## WORLD DICTIONARY OF HISTORIANS

Great Historians. An International Dictionary is a work due to be released in Bucharest through the contribution of over 200 specialists from several scores of countries. Contracted with the Greenwood Press where it will be issued in English, the dictionary will cover almost 1,000 entries divided into two volumes. The work is coordinated by Dr. Lucian Bala, full professor of historiography at the Faculty of History and Philosophy of the Bucharest University, who also authored the introductory studies of the two volumes (the first one until 1800, and the second covering the 19th and 20th centuries). The articles on Romanian historians and certain French historians. Copied were another four professors from the Bucharest University, Ligia Biru — in charge of specialists in prehistory, Sicilian Drezeanu — dealing with Byzantine historians, Eugen Cizek — specializing in Latin historians, Constantin Georgescu — an authority on Greek historians. Nearly 100 articles are written by Romanian authors. Most of the other authors are members of the International Commission of Historiography, set up in Bucharest in 1980, on the occasion of the 13th World Congress of Historical Sciences.

The first volume of the dictionary is soon to be handed to the publishing house. The outcome of a Romanian initiative (the same as the dictionary) the International Commission of Historiography also organizes world congresses and issues a review of historiography at Milan in four international languages, under the patronage of Bianca Valota, a professor working with the University of Milan.

## BUCOVINA WOOD...

Since 1936 a museum of wood-work has been functioning at Cimpulung Moldovenesc, in the northern part of Romania. A unique of the kind in Romania, the museum is the result of efforts made by several generations of tireless researchers, passionate collectors of treasures of folk art and ethnography.

Gathered here are more than 15,000 pieces worth entering any patrimony, divided into collections illustrating occupations like hunting, fruit picking, animal breeding, beekeeping, activities related to construction, household industry and exploitation (salt, sulphur and crude oil), the concern with beautifying the

environment. The top of a 17th oil mill bearing Moldavia's arms with a lion's head is considered by specialists one of the most valuable wood pieces existing in the world, worthy of illustrating the qualities of primitive art as the precursor of modern art. The oldest exhibit — wood sections, used as footbridges — date back to the 3rd century A.D.

Extremely valuable is a complete collection of musical instruments created by the peasants of Bucovina: horn, baglama, cobzale, sifera, shaher's pipes and long shophans' pipes. Several species of the plant wood — for instance, spruce, fir or European — are highly appreciated. As a matter of fact certain foreign researchers believe that the famous violins of Cremona were made of resonant wood brought from Bucovina, while today numerous specialists from order, from the heights of Moldavia, Vama and Poljovita, from Cimpulung Moldovenesc, a master of his land, the well-known violin maker, Dr. Roman Bratunaru, works in the wood mill, recently opened with the Faculty of Forest Engineering at the University of Medicine and Pharmacy. He produces violins, which only with hard work



## THE LITTORAL — A SOURCE OF GOOD HEALTH

● A health cure in the Romanian resorts strewn along the Romanian Black Sea coast can be undergone also during the cold season. ● Whatever the season, the littoral can cure a large number of affections, but even more of them can be prevented thanks to important natural factors. ● Eforie Nord, Neptun, Saturn, Mangalia and Mamaia — resorts and treatment bases opened all the year round ● For your vacations the Eforie Sud, Venus and Jupiter resorts lie at your disposal.

Having the shape of a huge arc covering almost 250 km, washed by the Black Sea, the Romanian coast boasts broad shores with fine sand, ultramodern resorts built in a charming architectural style. There are no sources of pollution, sunny days are sunny, good for sunbaths, within medium ranges of temperature.

Sited at the same altitude as Venice, the Côte d'Azur and Yalta, the Littoral is Romania's warmest geographical area, known for its athletic, well-lit climate of steps with temperate marine climate.

ed Nunta Zamferei (Zamfira's Wedding) which offers a rich folk programme.

In the vicinity there is the TEHRIGHIOL therapeutic lake with sapropelle mud and water with a great concentration of salt.

MAMAIA, sited between the sea and the Mamaia lake, five kilometers north of Constanta city, has a few kilometers of uninterrupted beach covered by extremely fine sand. An arboreal full of vegetation, washed by the sea and the Mamaia lake (especially designed for aquatic sports) complements the resort's offer.



rich in ultraviolet radiations and marine aerosols; the sea breeze ensures a stable temperature, a uniform regime of rainfalls permanently refreshing the air saturated with negative ions and aerosols, bearing well-known therapeutic effects.

The Romanian seashore offers multiple treatment possibilities thanks mainly to natural factors: springs of mesothermal waters at Mangalia, sapropelle mud in the Tehrighiol Lake which has exceptional therapeutic qualities, the sea water and many lakes abundant in mineral salts. All these sources are most effectively used by the treatment centres functioning all round the year — modern sanatoriums organized excellently in hotels, equipped according to the demands of world's most advanced medical technology, allowing for a vast and rational therapy.

From Năvodari to Vama Veche a necklace of resorts: Mamaia, Eforie Nord, Tehrighiol, Eforie Sud, Constanța, Neptun, Olimp, ensemble of (with the Eforie Nord, Saturn, Venus and Jupiter) resorts, with the Aurora range of hotels, Saturn and Mangalia offer tourists a splendid vista with modern hotels built in a both functional and beautiful architecture, surrounded by lakes and a luxuriant vegetation.

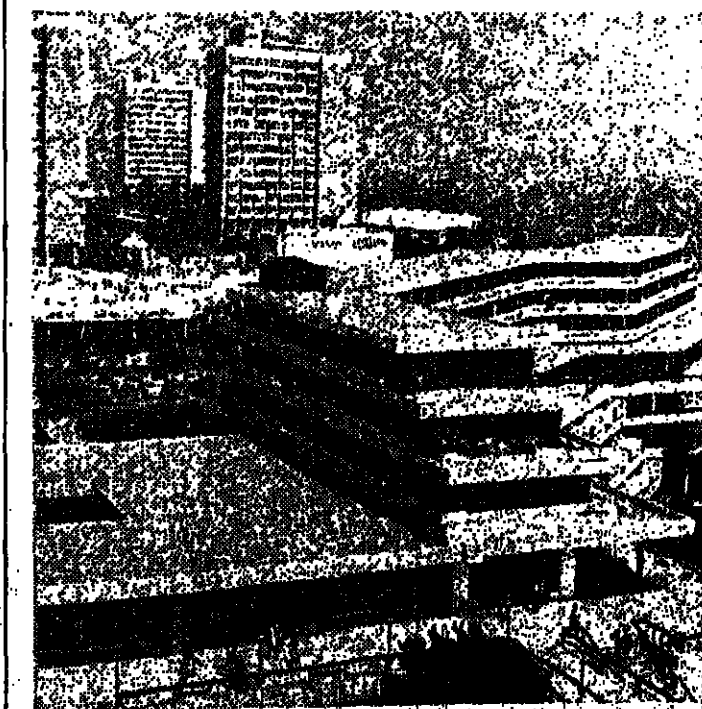
CONSTANTA is the gate for tourism on the Black Sea coast. The largest sea port of the country, Constanta is also full of museums (historical, archaeological, art, with many valuable exhibits) as well as many monuments of architecture and art, performances halls, etc.

EFORIE NORD, sited between the sea and the Tehrighiol lake, 14 km south of Constanta, is a resort for summer holidays and at the same time a balneal and opened all round the year. A rich vegetation surrounds an exceptional beach protected by a high seawall offering a vast panorama of the sea.

An important balneal sanatorium with best laboratories, modern functional explorations, installations for warm and cold water showers, a sauna, medical gym, halls, geriatric wards, etc. ensure the treatment of affections of the locomotory system, gynaecological, dermatological, infectious as well as diseases of the peripheral nervous system. It has many modern hotels, villas, camp grounds, restaurants, bars, sports grounds, etc. You can find here the famous Romanian restaurant, built

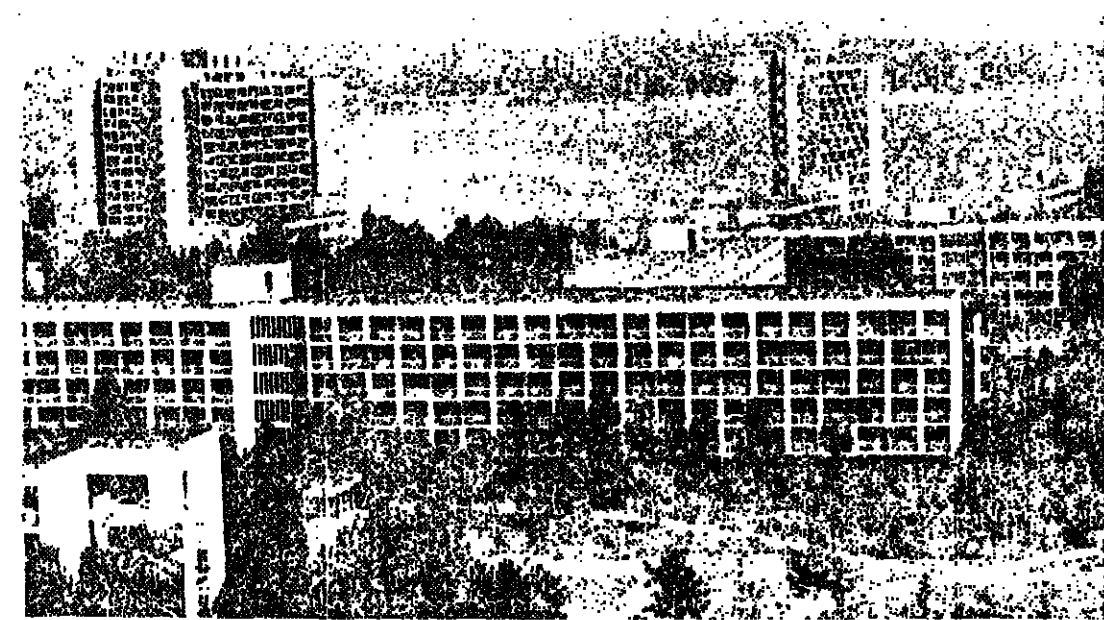
prices 30 hotels and large camp grounds, sports halls, a sauna, massage rooms, an Olympic pool, restaurants providing Romanian and international dishes.

NEPTUN-OLIMP, lying six kilometers north of Mangalia town, has a picturesque position, bordering an



oak-tree forest (Comoretova). Its hotels boast a varied architecture, remarkable through the simplicity and elegance of their architecture. Houses, villas, hotels, villas, restaurants (offering Romanian dishes), theatres and cinemas.

The balneal polytechnic of the resort is opened all round the year, being furnished with all the latest apparatus, means for electrotherapy, mud therapy, hydrotherapy, massage, medical gymnastics, etc. The resort is also a centre for the study of the multiple possibilities of recreation offered by the sea. In the southern part of the resort is the Olimp area with its comfortable hotels, restaurants, offering various dishes and



alcohol and a folklore programme).

MANGALIA, the southernmost seaside resort (11 km away from Constanta) has a mild climate, with picturesque houses alternating with the slim silhouettes of the modern edifices. The beach is vast and the elegant hotels are spread along the seashore. Here are important archaeological vestiges, an archaeological museum and a house of culture. The Mangalia treatment hotel, opened throughout the year, has a treatment base distributed on wards for therapy with sapropelle mud, pools, installations for treatment with sulphurous water, sections of hydrotherapy, medical gym halls, sections of geriatrics and acupuncture.

EFORIE SUD is a resort sited in an area full of vegetation, with old houses and modern hotels, villas and camp grounds, strewn along magnificent seavall. It provides treatment with therapeutic mud, while for recreation the resort has pools, sports grounds, etc.



JUPITER has a wide sandy beach near a forest, a real oasis of freshness. Elegant hotels border the sea, while the two tourist villages (Zostia and Lillac), the camp grounds, the tennis amusement centre, the sports grounds and the pools round off the resort's offer.

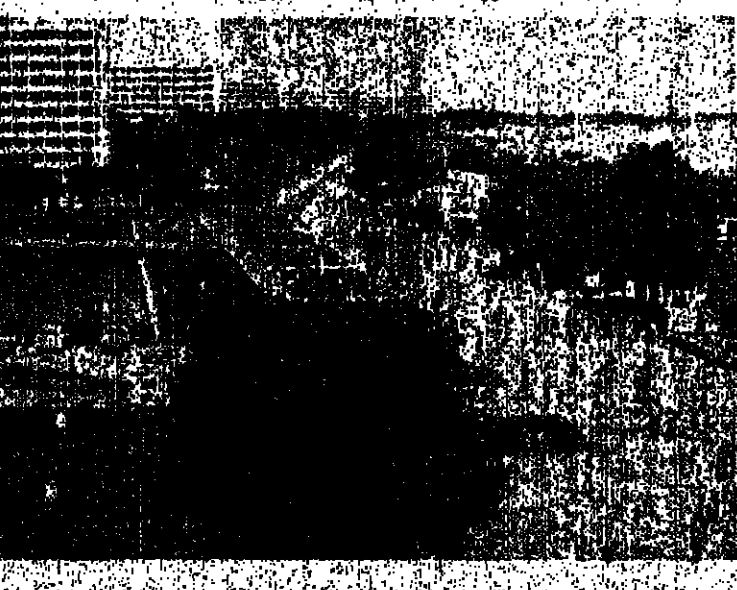
VENUS-AURORA. A real architectural style in the architectural style of the fundamental presence of the sea. An ensemble of 10 hotels bearing names of precious stones (Diamond, Saffir, Ruby, Topaz, etc.) make up the Aurora area. Here is a pavilion with two pools, a centre allowing for treatments with mesothermal sulphurous waters. It has sports grounds, shops and a famous restaurant, Chitral, offering Romanian dishes and a folklore programme.

COSTINESI is a locality traditionally organizing every summer Caravale, camp games, various contests, create a youthful atmosphere.

## THERAPEUTICAL RECOMMENDATIONS

● FOR THE EXTERNAL CURE: degenerative rheumatic affections (cervical dorsal and lumbar spondylitis, arthritis of various kinds); inflammatory rheumatic affections (rheumatoid arthritis following chronic articular rheumatism or focus infections, ankylosing spondylitis, psoriatic arthropathy, rheumatoid polyarthritis); rheumatic articular rheumatism affections (tenosynovitis, tendomyositis, tendoperititis, synovialitis, periarthritis); post-traumatic affections (post-traumatic articular dysfunction, physical stases after operations on muscles, tendons, articulations and bones, stases after sprains, luxations and fractures); peripheral neurological affections (post-traumatic pareses of limbs, polyneuritis after the acute phase, polyradiculoneuropathy in the acute phase, sequelae after poliomyelitis); affections of the central nervous system (paraparesis after arachnoiditis); gynaecological affections (ovarian insufficiency, chronic cervicitis, chronic affections of the ovaries and the oviducts, secondary sterility, sequelae after genital TB two or three years after sterilization); dermatological affections; respiratory affections; associated affections (otorhinolaryngological, cardiovascular, endocrine, metabolic and nutrition, occupational diseases).

● FOR THE INTERNAL CURE (only at the balneal sanatorium in Mangalia): chronic affections of the digestive apparatus, chronic affections of the biliary ducts, certain metabolic affections and allergic diseases. Mention should be made that these resorts apply treatments with the Romanian original products Peli-Amor, Gervolat, Epsil forte, Adelvit, etc.





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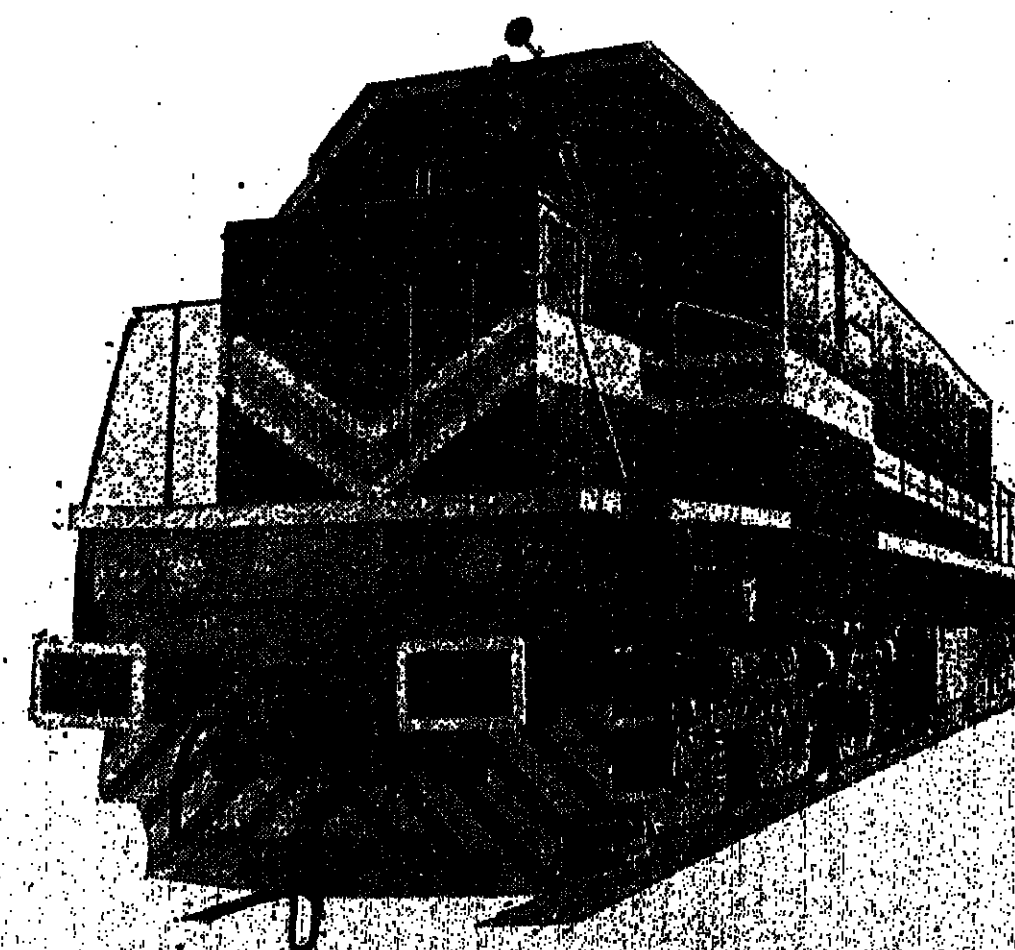
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